STATUTORY ENQUIRY—1926

STEEL INDUSTRY

VOLUME VI

Miscellaneous Written and Oral Evidence given before the Indian Tariff Board.

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I.—General representations regarding the manufacture of Rolled Steel.

1. THE INDIAN IRON AND STEEL COMPANY, LIMITED.

A.—WRITTEN.

(1) *Representation, dated the 14th May 1926.*

With reference to the Tariff Board's Communiqué, dated April 16th, 1926, we desire to represent that as this Company was formed with the ultimate object of manufacturing steel and as we have already made considerable progress in this direction by the successful operation of large modern blast furnaces, coke ovens and bye products plants, we are considerably interested in and in favour of the continuance of the protection now given to the Steel Industry in this country.

We will not attempt to quote figures proving the necessity for the continuance of the protective duties and bounties now granted as we feel the Tariff Board will have the fullest possible information at their disposal from the actual operations of the Tata Iron and Steel Co., Ld., over the last few years and which data will be far more reliable evidence than anything of this nature that we can put forward.

We do wish, however, to represent very strongly the necessity for granting sufficient and ample protection to the industry to enable not only the Tata Iron and Steel Co., Ld., to consolidate its position after having been protected by the war *plus* duties and bounties for eleven years but to enable other Companies to raise the necessary capital to lay down steel producing plant.

We consider that the present policy of granting tariffs and bounties for short periods of 2 or 3 years amounts to the grant of a monopoly to the Tata Iron and Steel Co., Ld., as no capitalist will risk his money in competitive ventures under such conditions, and that this policy will result in the consumer having to pay prices only fractionally lower than the import price when the Tata Iron and Steel Co., Ld., have at last become strong enough to withstand foreign competition without governmental aid.

Considering the country's natural resources, we feel confident that in a period of 10 to 15 years and given internal competition the Industry will be in a position not only to withstand foreign competition but also to bring prices to the European level and that it will be possible to build up an export trade; but so long as the manufacture of steel is in the hands of a single firm the danger of monopoly prices will always exist.

We consider therefore that it is imperative for the Government of India to grant full necessary protection to the Steel Industry for a minimum period of 10 years from April 1st, 1927, and the tariffs to be levied and/or the bounties to be paid be decided by Tariff Board enquiries to be held annually for this purpose alone.

(2) *Letter from the Indian Iron and Steel Company, Limited, dated the 9th September 1926.*

With reference to your request for statements showing employees of this Company prepared on exactly the same lines as the statements submitted this year by the Tata Iron and Steel Company, Limited, to the Tariff Board Nos. 57, 58, 71 and 72, we have pleasure in enclosing herewith these statements drawn up on exactly similar lines as we believe Messrs. Tatas' statements to have been compiled.

Our figures are inclusive of the whole of the labour employed by the Company at its works and in a way are not too favourable to this Company as a certain proportion of the "shop labour" which is inclusive of all our maintenance shop labour such as machine shop, smithy, foundry and pattern shop are employed on work for our mines and in connection with the supply of castings and such to the Indian Standard Wagon Company, Limited. We have, however, thought it better to include the whole of our labour at the works.

We may mention that the total number of employees is slightly in excess of the figure given by Mr. Fairhurst in his evidence before the Tariff Board but this is explained mainly by the fluctuation of contractors' gangs, our actual figures in August having been taken for these statements.

We may also mention that the labour employed on the blast furnace is less than given by Mr. Fairhurst as we have now included certain gangs of labour under "indirect labour" spreading them between the coke ovens and the blast furnaces which is a more correct allocation of same.

We trust these figures will be helpful to the Tariff Board.

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Enclosure No. 1.

Statement showing number of covenanted and uncovenanted employees (Direct and Indirect).

BLAST FURNACE.

Year.	Production.	Shop labour.	UNCOVENANTED EMPLOYEES INDIRECT LABOUR.		Direct labour.	Total labour.	Tonnage per head per annum.	Wages per head per annum.
			Traffic and Contract labour.	Total Indirect.				Rs.
1925-26. April to March 1926 . .	265,146	362	211	572	373	945	281	339

COKE OVENS.

1925-26. April to March 1926 . . .	292,612	288	113	401	390	791	370	335

Enclosure No. 2.

Statement showing number of covenanted and uncovenanted employees (Direct).

BLAST FURNACE.

Year.	Production Tons.	Covenanted employees.	Uncovenanted employees Direct labour.		Total Direct labour.	Tonnage per head per annum.
1925-26 . . .	265,146	Five (European) .	European	*nil.*	394	673
			Indian	16		
			Labour	373		
				389		

COKE OVENS.

Year.	Production Tons.	Covenanted employees.	Uncovenanted employees Direct labour.		Total Direct labour.	Tonnage per head per annum.
1925-26 . . .	292,612	Three (European) .	European	3	416	703
			Indian	20		
			Labour	390		
				413		

THE INDIAN IRON AND STEEL COMPANY, LIMITED.

B.—ORAL.

Evidence of Mr. G. H. FAIRHURST recorded at Calcutta on the 30th July 1926.

President.—You represent the Indian Iron and Steel Company?

Mr. Fairhurst.—Yes.

President.—Are you one of the Directors of that Company or do you represent the firm of Managing Agents?

Mr. Fairhurst.—I am one of the directors of the company as well as one of the partners of the firm of Managing Agents.

President.—At present your company is interested in the manufacture of pig iron?

Mr. Fairhurst.—Yes.

President.—And you have therefore some interest in this enquiry in connection with steel?

Mr. Fairhurst.—Yes.

Cost of manufacture of pig iron.

President.—I think at the outset I should like to point out that it is essential for the Board to find out to what stage the manufacture of pig iron has reached in this country and the cost of producing pig iron, and the Board will be glad if you could see your way to giving us the costs.

Mr. Fairhurst.—As pig iron manufacturers I may say that we are not asking for protection or a bounty on pig iron and for good reasons we would prefer not to publish our costs.

President.—In this representation of yours you suggest the continuance of protection to the steel industry and you also claim that protection must continue for a reasonable period of years. You cannot manufacture steel without pig iron?

Mr. Fairhurst.—We say we are in favour of protection for the steel industry and consider that if protection is given it is necessary to fix it for a term of years in order to enable people like ourselves to go into the business.

President.—But in order to determine the measure of protection is it not necessary for the Board to know the cost of producing pig iron?

Mr. Fairhurst.—I think the Board have ample information on that already.

President.—There is information but that is not complete. We can have more complete information now. Since the first enquiry you have been manufacturing pig iron on a considerable scale and I think it is important for the Board to see at what cost pig iron can be manufactured in this country for the cost of pig iron is an important factor.

Mr. Fairhurst.—We are not asking for any definite measure of protection and we have not sufficient information regarding the steel business to ask for any definite percentage or whether it should be by bounty or protective duty. We don't know what should be asked for.

Mr. Mather.—Do you think it really necessary to ask for any?

Mr. Fairhurst.—It appears evident from the experience of others.

President.—Supposing you don't give us your costs and we put forward a scheme which may assume your cost at 50 per cent. lower than they actually are, you must not blame us and say that the protection was inadequate.

Mr. Fairhurst.—I think the Tariff Board has sufficient knowledge of pig iron manufacture in India to know our costs.

President.—I don't wish to say more than is necessary but I think it is essential that you should co-operate with the Board in arriving at a correct result.

Mr. Fairhurst.—We are anxious to do so, hence my presence here, but not in so far as it is going to do us considerable harm.

President.—The Board has got some means of safeguarding itself and that is this. In another enquiry we recommended bounties and we excluded one firm which refused to give us information. I don't say that it will always be done but if we find that costs are withheld from us on grounds which are not considered sufficient, then you run a little risk.

Mr. Fairhurst.—I would like to say that we are anxious to co-operate with the Board in all ways possible, but already a good deal of harm has been done to the pig iron industry by the publication of costs and it is possible that far more harm may be done in the future.

President.—What exactly was the harm?

Mr. Fairhurst.—The United States of America when enquiring into the question of imposing countervailing duties on pig iron shipped to America had the Indian Tariff Board's last reports, they were therefore able to know exactly what the cost of production of pig iron and steel was in this country and they were able to base their enquiry on that information given in the Board's reports.

President.—I understand that the countervailing duty depended not so much on that as on the fact that you were selling for export to America at a lower price than in this country.

Mr. Fairhurst.—That is not correct, the first enquiry started was on the question of dumping; it was an anti-dumping enquiry but no decision was given in that enquiry; it is still pending; the countervailing duty that has been put on Tata's pig iron is in view of the bounty that they receive from the Government of India on steel ingots.

Mr. Mather.—But the United States Government and everybody else know and would know that the Tata Iron and Steel Company were receiving a bounty quite independently of your own costs of manufacture. I have not seen that any action has been taken by the American Government on the actual basis of the cost of manufacture of Indian pig iron. In fact the publication of costs of manufacture which are less than the export price to America removes one argument for putting in anti-dumping duties against Indian pig iron.

Mr. Fairhurst.—I did not want to go into detail on this point; the actual position is this as regards the anti-dumping duty. The American Government can put on this duty; being the difference between the selling price of pig iron to America f.a.s. Calcutta and the selling price in this country, or they can if they wish ascertain our costs of production and if we are selling below our cost of production they can put on an anti-dumping duty by that amount. In future it is quite possible we may find it necessary to sell at lower prices to America and that is one of the reasons I took into consideration in not putting our costs before the Board.

President.—Supposing protection was given to the Steel industry you would be more interested in steel than in pig iron, would you not?

Mr. Fairhurst.—It is a thing very much for the future to decide. We know it is quite impossible to raise any money now for steel under any conditions.

President.—Well, I cannot say more than what I have already said. Supposing we recommend any protection and it takes the form of a bounty, and if we feel that you have not assisted us I think we may be justified in saying that this particular firm should be excluded from the benefit of the bounty. For the protection of the Board such a course may be necessary. We really don't see any sufficient reason in what you have stated for not giving us the information. The Tata Iron and Steel Company has given us all their costs. Well, the Government of India and the Legislature insist upon knowing everything before taking any measures so that if we are not armed with sufficient facts to that extent our recommendations are incomplete. Whenever possible we have insisted upon it and so far as it lies in our power we must protect ourselves.

Mr. Fairhurst.—Then what it comes to is this, that had we not put in any representation at all we would have been in a better position than by making this representation and so assisting the Board.

President.—We would probably have written to you to come and assist us. It would have come to the same thing.

Mr. Fairhurst.—I am sorry but I don't want to produce our costs.

Dr. Matthai.—Supposing we were able to get definite costs of pig iron from one of the producers in the country, then would it be of any practical advantage to you to keep yours from the Tariff Board, from the point of view of anti-dumping measures in other countries?

Mr. Fairhurst.—But the only other producer at present has been barred from shipping to the States and costs do vary in different ways, some of the works are run more economically than others. With us steel is very much for the future; at present it is essential we look to the welfare of our pig iron business.

President.—You are entitled to do that but you may not find it to your advantage in the end.

Mr. Fairhurst.—The Board have been to our works more than once and they know what it is like whether it is run on economical lines and efficiently. They know quite well that our costs are satisfactory.

President.—That general impression does not help us very much in arriving at definite results.

Dr. Matthai.—Might it not do you some harm in this way—if we get the costs from one of the pig iron producers in the country and we produce these figures, an impression may be formed that the prices of your pig iron are below the costs of that particular firm. It might be worth your while to try to refute that impression to prevent anti-dumping measures against you.

President.—We have got the cost of one firm in detail and assuming that you start a steel works you would be interested in the production of steel? The firm which gives all its costs to the Board would have reason to complain if any other firm was getting the benefit of it without having assisted the Board or the Government in arriving at a decision.

Mr. Fairhurst.—You have another company that has not come forward at all, whereas we have come forward and offer to do what we can to assist the Board. Are they therefore to be in a more fortunate position than we are because they have not come forward?

The pig iron plant.

President.—I am afraid we must leave it at that. Your pig iron plant consists of two blast furnaces?

Mr. Fairhurst.—Yes.

President.—How many coke ovens have you got?

Mr. Fairhurst.—160.

President.—Are these blast furnaces of the American model?

Mr. Fairhurst.—They are of American design.

President.—And the coke ovens are of English design, are they not?

Mr. Fairhurst.—Yes.

President.—I think in the last enquiry you stated that your capital was Rs. 3 crores?

Mr. Fairhurst.—Yes.

President.—Have you written down any of your capital?

Mr. Fairhurst.—We have written it down by rupees one crore and a half.

President.—When did you write it down?

Mr. Fairhurst.—Last year.

President.—I think the bulk of your plant was purchased about 1918-19?

Mr. Fairhurst.—The Company was formed in March 1918 and we purchased the plant between the end of 1918 and end of 1919.

President.—Did you follow any particular method in writing down your block value? Did you re-value your block or what did you do?

Mr. Fairhurst.—We made a rough revaluation of the whole thing or in other words we estimated what it would cost to build a similar plant.

President.—Of the same capacity?

Mr. Fairhurst.—Yes. I would like to mention that we have raised a debenture loan of Rs. 75 lakhs on the properties at the same time the capital of the company was written down.

President.—What does that Rs. 75 lakhs represent then?

Mr. Fairhurst.—That was to pay off temporary loans and a small amount for working capital.

President.—The capital consists of Rs. 150 lakhs ordinary shares and Rs. 75 lakhs debentures?

Mr. Fairhurst.—Yes. There are no preference shares.

President.—In making this revaluation did you take recent prices?

Mr. Fairhurst.—We made a rough estimate of what we thought we could build a plant for at the then prices.

President.—Did you get any actual recent prices?

Mr. Fairhurst.—In the power houses, for instance we made a list of the machines and we estimated that we could purchase the same machines at that date for such and such a price. We did not go into elaborate enquiries as to the present day prices.

President.—You thought that was a reasonable writing down?

Mr. Fairhurst.—Yes.

President.—Your firm of managing agents were in fairly close touch with the prices of machinery at that date?

Mr. Fairhurst.—Yes.

Mr. Mather.—The value of the plant, I take it, was not taken at Rs. 150 lakhs but at Rs. 225 lakhs.

Mr. Fairhurst.—Yes.

Mr. Mather.—You don't mean to say that you wrote down and therefore you took the value of the plant.

Mr. Fairhurst.—We take the value of the plant as 2¼ crores.

President.—I remember that so far as the exchange was concerned, I think you had a very favourable exchange for part of the purchases.

Mr. Fairhurst.—Yes, for a portion. A lot of the plant did not come to be shipped until 1920.

President.—Is the Indian Standard Wagon Company connected with the Indian Iron and Steel Company?

Mr. Fairhurst.—It is quite a separate Company—only connected in the way that it obtains power, water and such from the Indian Iron and Steel Company.

President.—But it is quite an independent Company.

Mr. Fairhurst.—Yes.

President.—It has got the same managing agents.

Mr. Fairhurst.—Yes.

President.—I think in the last enquiry you told us that your blast furnaces were designed to turn out about 300,000 tons. Have you reached that production?

Mr. Fairhurst.—For a year.

President.—You said that you were doing 350 tons a day then.

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Mr. Fairhurst.—I said that we would be able to do more. We have done for a whole month up to 900 tons daily average.

President.—As regards your by-products have you got a good market?

Mr. Fairhurst.—Yes.

President.—What are your principal by-products?

Mr. Fairhurst.—Coal tar and sulphate of ammonia.

The Company's markets.

President.—Have you found a steady market?

Mr. Fairhurst.—We have the whole of our coal tar sold under contract.

Dr. Matthai.—How do you sell sulphate of ammonia?

Mr. Fairhurst.—We are a member of the Sulphate of Ammonia Federation. They take the whole output.

Dr. Matthai.—Practically all of it is exported.

Mr. Fairhurst.—Originally it was. Now I believe the whole of it is sold in India.

President.—What is the price of pig iron in the country?

Mr. Fairhurst.—According to grade from Rs. 60 to Rs. 68 delivered in Calcutta

	Rs.
No. 1	68
No. 2	66
No. 3	64
No. 4	62

President.—What is the export price?

Mr. Fairhurst.—We are exporting to Japan at Rs. 44 and Rs. 46 f.o.b. Calcutta according to grade. To America the last lots shipped were about Rs. 39 to Rs. 43 f.o.b. Calcutta, we are not shipping there now.

President.—They find their own freight.

Mr. Fairhurst.—No, we do and sell c.i.f. foreign ports.

President.—Is it on the East or West Coast of United States of America?

Mr. Fairhurst.—Both.

President.—What is the freight from Calcutta to the East Coast?

Mr. Fairhurst.—The freight varies from 15*s.* to 17*s.* 6*d.*

President.—And to the Pacific.

Mr. Fairhurst.—The last freight we paid was 5 dollars or 20*s.* roughly.

President.—There is a difference of 3 or 4*s.*

Mr. Fairhurst.—Yes.

President.—What is the freight to Japan?

Mr. Fairhurst.—Rs. 9.

President.—I take it that it goes by the Japanese line.

Mr. Fairhurst.—Yes. Also by the British India Steam Navigation Company and the Indo-China Steam Navigation Company; all being in the Far Eastern Shipping Conference.

President.—Do you find any difficulty in getting freight?

Mr. Fairhurst.—Not now. There was some difficulty 18 months ago.

President.—I understand up to a certain limit there is no difficulty. When you exceed that limit, you find difficulty in getting freight.

Mr. Fairhurst.—We find we can get space for pig iron at reasonable rates, that is really ballast cargo rates for about 30,000 tons a month from Calcutta.

President.—To the United States of America.

Mr. Fairhurst.—To all countries.

President.—But if you exceed that quantity you will have to pay the ordinary freight.

Mr. Fairhurst.—Yes, attractive rates in competition with ordinary cargo.

President.—What difference would that make?

Mr. Fairhurst.—When the demand was more than the supply we were paying up to 28*s.* for freight.

Mr. Mather.—To the United States of America?

Mr. Fairhurst.—Yes.

President.—Have you been exporting pig iron to Europe?

Mr. Fairhurst.—Yes. To Glasgow, Hamburg and Antwerp.

President.—Would you mind giving us your prices?

Mr. Fairhurst.—Rs. 35 to Rs. 36 f.o.b. Calcutta for basic pig iron to Glasgow before the coal strike.

President.—What is the freight?

Mr. Fairhurst.—It has been as low as 12*s.* 6*d.* but is now 16*s.*

President.—And to Middlesborough.

Mr. Fairhurst.—That is usually No. 1 iron, the last price for No. 1 was 75*s.* a ton c.i.f.

Mr. Mather.—Have you made many shipments to Middlesborough?

Mr. Fairhurst.—Yes. But I should say we have not shipped more than a thousand tons in all.

President.—And to Glasgow.

Mr. Fairhurst.—We have shipped a substantial quantity sometimes, 2,000 tons in a month.

President.—And to Hamburg.

Mr. Fairhurst.—We can usually ship 1,000 tons a month, that is to Hamburg and Antwerp.

Supplies of raw materials.

President.—Are you working your own ore mines or are you still purchasing your ore?

Mr. Fairhurst.—We are working our ore mines.

President.—How long have you been working now?

Mr. Fairhurst.—Since 1923 in fair quantities.

President.—I think you were not working them when we last enquired.

Mr. Fairhurst.—The line had only just then been finished. We were buying a lot outside. We are still taking some ore from the Bengal Iron Company now.

President.—You have not started working your own mines fully yet.

Mr. Fairhurst.—Not fully. We are doing certain development work which we hope to complete this year.

President.—Do you expect to get them at a lower rate than you are paying now?

Mr. Fairhurst.—Yes. We should get it at Rs. 2-8-0 a ton.

President.—Delivered at the works.

Mr. Fairhurst.—F.o.r. mines.

President.—Your mines are about 150 miles away.

Mr. Fairhurst.—173 miles from the works.

Mr. Mather.—What is the freight?

Mr. Fairhurst.—Rs. 1-10-2 per ton.

Mr. Mather.—That is about Rs. 4 delivered at your works.

Mr. Fairhurst.—Yes.

President.—You are satisfied that you have an ample supply of ore in your own mines?

Mr. Fairhurst.—Quite.

President.—Have you any idea as to what they contain?

Mr. Fairhurst.—We made very rough calculations and it came out to something like 1,000 million tons but the bodies have not been properly proved and some may be inferior.

Mr. Mather.—In your own mines?

Mr. Fairhurst.—Yes.

Mr. Mather.—It would keep you going for a very long time.

Mr. Fairhurst.—Yes.

President.—Have you made any alterations in your arrangements for coal since we last reported?

Mr. Fairhurst.—We are still carrying on with contracts based on the Railway Board's price.

President.—Have you got your own coal mines?

Mr. Fairhurst.—Yes, we have coal properties.

President.—You don't intend to work them at present.

Mr. Fairhurst.—No.

President.—What is the price of coking coal now?

Mr. Fairhurst.—Our present average price delivered at the works is about Rs. 5-8-0.

President.—Coal delivered at the works.

Mr. Fairhurst.—Yes.

President.—You don't use any other coal. You use chiefly your gas.

Mr. Fairhurst.—We don't use any coal for steam raising. We have a large excess supply of waste gas.

President.—Have you ever tried to measure how much is produced and how much is wasted and how much is used by you?

Mr. Fairhurst.—We have really so much surplus that we have no interest in measuring how much we do use.

President.—At present you have not. Supposing you are manufacturing steel, have you any idea as to what that surplus means?

Mr. Fairhurst.—We can see what is done generally in other plants.

President.—If you go by the plant similar to the Tata Iron and Steel Company, you may not find that it takes you far.

Mr. Fairhurst.—I don't think we would go by that.

President.—That is one of the points, we have to ascertain how far you can do without extra coal if you are to make steel.

Mr. Fairhurst.—I don't think anybody would go very much further into the Steel business here than a tonnage for which they have sufficient waste gas.

President.—Do you mean to say that your waste gas will be sufficient for the purpose of heating as well as for operating?

Mr. Fairhurst.—Yes, up to a certain tonnage of steel.

President.—What do you do with blast furnace gases? Are they also wasted?

Mr. Fairhurst.—They are used in the stoves and boilers, but we cannot use anything like the full quantity.

Dr. Matthai.—You have no kind of tentative estimate as to the total tonnage that could be worked with the existing waste gas.

Mr. Fairhurst.—Well, roughly speaking I estimate that we could turn out about 150,000 to 200,000 tons of finished steel from the waste gas which we have.

Dr. Matthai.—But your blast furnace capacity is not bigger.

Mr. Fairhurst.—Our present blast furnace capacity is 300,000 tons.

Dr. Matthai.—Would you be able to make all that into steel?

Mr. Fairhurst.—No.

President.—I think if you could run your steel works on your coking coal, you would have done something that has not been done here.

Mr. Fairhurst.—You can work your steel works up to a certain tonnage.

Dr. Matthai.—May I take it that if you had the idea of running a steel plant, then 200,000 tons a year would be the maximum output that you contemplate?

Mr. Fairhurst.—Yes. Unless we extend our coke ovens and furnaces.

President.—Would you get the same quantity of gas from your coking coal as you would from British coal?

Mr. Fairhurst.—We get less gas from Indian coal, the volatile being about 24 per cent.

Mr. Mather.—You should get more than they get from Ruhr coal?

Mr. Fairhurst.—I don't know the analysis of Ruhr coal. I know English coal is very much higher in volatile than Indian coal.

President.—I didn't quite follow your reply when you said that you could make a certain quantity of steel. When you make more steel you require more pig iron and more coke.

Mr. Fairhurst.—Yes.

President.—So that the result ought to be the same.

Mr. Fairhurst.—My point is that we have a very large surplus of gas now which we blow off into the atmosphere. It is not required in the production of iron or coke. That gas we have available to produce steel. We can produce a certain tonnage from that gas. Beyond that tonnage we would have to put in gas producers.

President.—Beyond that tonnage from the same quantity of pig iron.

Mr. Fairhurst.—Yes.

President.—But we are assuming that your blast furnace capacity is sufficient for your steel purposes. Then in that case would it not follow that you would not require any extra gas producers?

Mr. Fairhurst.—We have not gone into this as far as that, because we have no prospect of raising money for the steel works, but what I would say definitely is that we would not go in for a steel plant if we had to put in gas producers and use steam coal. We would limit our production of steel to the amount of waste gas available. Then again if we go in for steel we may build more blast furnaces which would put more waste gas available and allow us to keep the present market in pig iron sales.

President.—Supposing you want 100,000 tons of extra pig iron, then the extra gas you will get from the coke used will be sufficient for the extra pig iron that you would use in making steel.

Mr. Fairhurst.—I have not gone into the matter carefully enough to say how the figures would come out. I don't think any information that I may give off hand would be very reliable on that point.

Practice in the coke ovens.

President.—Would you object to telling us your tonnage per head per man employed in the coke ovens?

Mr. Fairhurst.—We employ altogether about 1,650 men. 600 are employed on the blast furnaces, 450 on the coke ovens and the balance are employed on the maintenance shops, power houses, etc.

President. Does this number include what may be called indirect labour?

Mr. Fairhurst.—The indirect labour is the balance—about 600.

President.—Is that included in the figure that you have given?

Mr. Fairhurst.—Yes.

President.—And then 450 is direct labour.

Mr. Fairhurst.—Yes, on the coke ovens and 600 on the blast furnaces.

President.—I suppose you work three shifts a day.

Mr. Fairhurst.—Yes.

President.—It comes to about 550 men on the whole per shift.

Mr. Fairhurst.—Yes.

President.—I think that you have got rather nice arrangements for handling your coal and coke.

Mr. Fairhurst.—They are quite modern and well designed.

President.—I saw a platform where you can use any kind of wagon and unload your coal mechanically.

Mr. Fairhurst.—That was designed to suit the variety of wagons that we have on the railways.

President.—Whether they open from the bottom, side or any other place you have got an arrangement by which it gets on conveyor belts.

Mr. Fairhurst.—Yes, two conveyor belts.

President.—You don't employ cooly labour to handle coal.

Mr. Fairhurst.—Only to push it out of the wagon doors.

President.—But not to carry.

Mr. Fairhurst.—No.

President.—Your plant is laid out in such a way that if you want to go in for extensions for the manufacture of steel, you can do so without disorganising your operations.

Mr. Fairhurst.—Yes. We have a site that we had always in mind for a future steel works. Similarly we have sites for extensions for the blast furnaces and the coke ovens.

President.—These extensions will not interfere with the other operations.

Mr. Fairhurst.—Not at all.

President.—Your power plant is capable of producing more power than you need at present?

Mr. Fairhurst.—The plant that we have put down is very much larger than we are using now. At that time it was intended to generate power to make steel castings for the Indian Standard Wagon Company. We have a productive capacity of about 6,000 k. w. We are using about 1,600 to 1,700 k. w.

President.—If you want to extend your works, this power would last you some time

Mr. Fairhurst.—To a certain extent. We can put down more power in the same power house.

President.—Has your practice improved very much since we last reported as regards the amount of coke that you use?

Mr. Fairhurst.—It has. We have made considerable progress more in the way of selection of raw materials and the sizing of these.

President.—And coke?

Mr. Fairhurst.—Coke and limestone. We have paid very great attention to the selection of ores and the sizing of them.

President.—Do you mix any non-coking coal with coking coal?

Mr. Fairhurst.—No. We have no need to do that. We are not short of gas and one would only do that if one is short of gas for heating purposes.

Mr. Mather.—What is the ash content of your coke?

Mr. Fairhurst.—Between 19 and 20 per cent.

President.—Has it improved since you first started?

Mr. Fairhurst.—The quality of the coke has not improved very much in the matter of analysis because we are using the same coal. We are buying nothing but 1st class Jheria coal. But the mechanical condition of the coke has improved.

President.—In what sense?

Mr. Fairhurst.—In the sense that we find it better to work the coke ovens at a higher temperature. It is stronger and smaller due to the fact that we are working our ovens at a higher temperature than we used to.

Practice in the blast furnaces.

President.—As regards the raw materials in the pig iron, I understood you to say that you had made alterations. Are they in the charging or what?

Mr. Fairhurst.—We have made alterations in the charging but the largest amount of improvement has been obtained from the sizing of the iron ore, coke and limestone. We used to take the ore and charge it to the furnace anything up to 8 inches in size. Now we have brought it down to 4½″ and we are going to bring it down to 3″. We are putting crushers in the ore mines to crush it to this size.

President.—Has that the effect of shortening the time?

Mr. Fairhurst.—It has the effect of enabling us to make a ton of iron with less coke.

Mr. Mather.—How much coke do you use now?

Mr. Fairhurst.—In the cold weather we are running month by month to about 21½ cwts. Last month our actual figure was 22½ cwts.

President.—Does it vary according to the weather?

Mr. Fairhurst.—Yes.

President.—In the cold weather do you use less?

Mr. Fairhurst.—Yes, owing to the moisture in the air.

Mr. Mather.—The average would be under 22 cwts. for a year.

Mr. Fairhurst.—Our average is about 22·0 cwts.

President.—At present I take it that you really do not know what your works cost may be because you cannot take sufficient credit for these gases.

Mr. Fairhurst.—We only take credit for the gas that we use. We fix a lump sum which we think is a reasonable amount to charge.

Mr. Mather.—What do you base that on?

Mr. Fairhurst.—On the cost of coal which would be consumed otherwise.

Mr. Mather.—I take it that you sell power at a profitable rate to the Indian Standard Wagon Company?

Mr. Fairhurst.—Yes, half an anna per unit.

President.—Do they use a certain amount of gas direct or do they simply take power from you?

Mr. Fairhurst.—They simply take power from us. We have been considering a scheme whereby they would take gas to be used in their furnaces. They have not had the money to go on with the scheme.

President.—Do you sell your gas to anybody else?

Mr. Fairhurst.—No.

President.—So, that is an uncertain factor. You do not know how much you may be wasting in that way.

Mr. Fairhurst.—We have not gone into that.

Price of coal.

President.—Are you prepared to give us an estimate as to the cost of coal for the next four years?

Mr. Fairhurst.—My view is that we will not see any increase over present prices.

President.—For the next three or four years?

Mr. Fairhurst.—For the next two or three years.

President.—Do you use a considerable quantity of coal in your other works?

Mr. Fairhurst.—We are using 40,000 tons a month.

President.—And that is your view?

Mr. Fairhurst.—That is my view. I say certainly for one year we won't see any increase.

President.—Your contracts are at the Railway Board rate.

Mr. Fairhurst.—They are based on the Railway Board rates and are a few annas above or below.

President.—You think that that arrangement has worked satisfactorily.

Mr. Fairhurst.—Of course for the last two or three years we could have bought cheaper.

President.—What is the Railway Board rate now?

Mr. Fairhurst.—It is Rs. 4-15-6 for colliery for 1st class coal.

President.—What will be the price for Selected Jheria.

Mr. Fairhurst.—About Rs. 5-7-0 or Rs. 5-8-0.

President.—We have been told that there is a difference of 12 annas between 1st class Deshergarh and Selected Jheria.

Mr. Fairhurst.—I have not got the exact figures. Deshergarh does not come into our reckoning at all. It is non-coking coal.

President.—I see that you have made a considerable reduction in the number of men since we last enquired. You told us that there were about 2,000 men at that time.

Mr. Fairhurst.—We have made considerable reductions, not only in men but in supervision as well.

Dr. Matthai.—Is Asansol a good place for your works?

Mr. Fairhurst.—It is a good centre, there is a big town and market. It is a large Railway centre. The E. I. R. and B. N. R. join there. There is plenty of good water.

Dr. Matthai.—If you have a Steel Works at Asansol, is there any kind of natural advantage which you may have over Jamshedpur from the point of view of labour and things of that sort?

Mr. Fairhurst.—We could not improve on our present situation as regards site.

Dr. Matthai.—From the Railway point of view.

Mr. Fairhurst.—Yes, we have two railways. One really brings in practically all the raw materials and the other one takes out all our products.

Staff.

President.—How many Europeans have you on the blast furnaces?

Mr. Fairhurst.—Four.

President.—How do you work with four?

Mr. Fairhurst.—We have one Superintendent, one Assistant Superintendent, and two Europeans on shifts and one Indian on a shift.

President.—And in the Coke Ovens?

Mr. Fairhurst.—Four.

President.—How many of them are Americans?

Mr. Fairhurst.—Originally they were all Americans and we had six. We now have two Americans, two Englishmen and one Indian.

President.—They are on the blast furnaces.

Mr. Fairhurst.—Yes.

President.—On the Coke Ovens?

Mr. Fairhurst.—We have all Englishmen.

President.—Your Coke Ovens are English?

Mr. Fairhurst.—Yes.

President.—Do you find them as satisfactory as the American?

Mr. Fairhurst.—Quite as satisfactory.

President.—Do you think that they are as economical to work as the American ovens?

Mr. Fairhurst.—The American coke ovens are generally larger. They get a bigger production per oven. I think that the coke oven plant we have is more efficient in the way of recovery of by-products than the figures I have seen for American practice out here. The American ovens are worked at higher temperatures. I think that there is more destruction of by-products in the top of the ovens than there is in the English ovens.

By-products.

President.—You don't wish to go in for any other by-products besides these two.

Mr. Fairhurst.—At present we have a benzol plant under consideration. The Government of India approached us and said that if we put down a benzol plant they might buy their army requirements from us. But nothing is fixed as yet.

President.—Would it mean less recovery of something else if you had benzol at the same time?

Mr. Fairhurst.—No. Benzol would be recovered after the other by-products have been recovered.

President.—I saw that you were making napthaline balls. That is a small thing.

Mr. Fairhurst.—Yes.

President.—You are using something that would be wasted otherwise.

Mr. Fairhurst.—Yes, otherwise we would have to throw it in the paddy fields.

President.—Is there a good market for naphthaline balls?

Mr. Fairhurst.—The Army alone take 40 tons a year. We had their contract last year.

President.—Is there any manufacture of disinfectants on a large scale?

Mr. Fairhurst.—I believe Turner Morrison's manufacture quite a lot. They purchase the whole of our coal tar.

President.—Have you found any use for slag?

Mr. Fairhurst.—Yes, for road making.

President.—For yourselves.

Mr. Fairhurst.—Yes. We are now also supplying the Bengal Nagpur Railway for ballast as a trial.

President.—If you get a market like that, it would be a good thing.

Mr. Fairhurst.—Yes.

President.—Is it as waterproof as other ballasts?

Mr. Fairhurst.—Personally I think it is as good as stone ballast. The price we get for slag does not mean that we are going to make very much out of slag in the future. It costs a lot to break it.

President.—It would save you a lot of space if you could get rid of it?

Mr. Fairhurst.—Yes.

The manufacture of steel.

President.—As regards your representation about protection of steel have you formed any idea as to what you intend to do if protection is given?

Mr. Fairhurst.—Last year we went so far as to draw up a scheme for steel works, but we have not gone any further with it because we found it was not possible to raise the capital.

President.—What did you propose to roll?

Mr. Fairhurst.—This scheme was drawn up with the idea of turning out 120,000 tons of rails per year.

President.—Do you think it was a good proposition?

Mr. Fairhurst.—My view now is that it would be a very much better proposition to go in for that quantity of sheets.

President.—The difficulty is it requires a little more practice to roll than rails do. Have you considered that?

Mr. Fairhurst.—That is so, but, on the other hand, you will not have any rejections on account of analysis as in the case of rails. Any kind of sheet will fetch better prices here than scrap rails.

President.—So that if you start any steel work you will go in for sheets, both plain and galvanized?

Mr. Fairhurst.—That is my present view.

Mr. Mather.—It does not follow, does it, that because you can sell poor quality sheets at a higher rate than scrap rail it would lower the cost of production?

Mr. Fairhurst.—No.

President.—Then as regards the amount of protection I don't think you say much. The main thing is to get some idea as to what—having regard to the conditions of the steel industry here and in other countries—you would expect as a fair return to attract capital.

Mr. Fairhurst.—My view is that you will have to pay 5 per cent. on your capital during the years of construction and should be in a position to pay at least 8 per cent. afterwards.

President.—How many years would you take for construction?

Mr. Fairhurst.—In our case it would take between 3½ to 4 years to produce steel. In the case of new companies having to build their own coke ovens and blast furnaces, open out ore mines and so on I think it will take seven years to produce steel.

President.—By 8 per cent. do you mean an average of 8 per cent.?

Mr. Fairhurst.—Yes, after you commence producing.

President.—A part of it would have to be ordinary capital, a part may be debentures and a part preference and so on?

Mr. Fairhurst.—I have not considered that. All I have gone into is the question of the money that would be required to build a plant of that capacity. As to how it can be raised will have to be left to the financiers.

President.—What do you assume you would require to put up a plant like that?

Mr. Fairhurst.—Two and a half crores of rupees to produce 120,000 tons of finished steel.

President.—In addition to your blast furnaces?

Mr. Fairhurst.—Yes.

President.—Would that give you enough working capital?

Mr. Fairhurst.—Yes.

President.—Would it include coal mines?

Mr. Fairhurst.—No.

President.—Ore mines?

Mr. Fairhurst.—Yes.

President.—That is for 120,000 tons of steel and 300,000 tons of pig iron?

Mr. Fairhurst.—Yes.

Mr. Mather.—That 2½ crores does not include the existing blast furnaces, does it?

Mr. Fairhurst.—No, that is 2¼ crores.

President.—What it comes to then is this—4¾ crores of rupees would enable you to produce 120,000 tons of steel and would leave you 140,000 tons of surplus pig iron?

Mr. Fairhurst.—Yes.

President.—How many open hearth furnaces would your plant include?

Mr. Fairhurst.—Three.

President.—Would they be tilting?

Mr. Fairhurst.—We should go in for tilting furnaces although the scheme we drew up was for stationary furnaces.

Mr. Mather.—Does your mill contain anything but just the blooming mill and the rolling mill?

Mr. Fairhurst.—We have a 32″ roughing mill.

Mr. Mather.—What size of blooming mill?

Mr. Fairhurst.—40″ electrically driven.

Mr. Mather.—That would mean that your capital for mills would be very excessive for the quantity of steel actually rolled?

Mr. Fairhurst.—That is so, but I think it is advisable to put it down in that way.

President.—What would be the rolling capacity of the blooming mill?

Mr. Fairhurst.—At least four times that.

President.—And the 32″ mill?

Mr. Fairhurst.—That I think would only be required as we increased our tonnage. Although it is included in this estimate I think we can do without it to start with.

President.—Then you will only require the blooming mill?

Mr. Fairhurst.—Yes.

Mr. Mather.—What size of rail mill have you put down there?

Mr. Fairhurst.—32″ roughing mill and 28″ finishing mill.

President.—Can you tell me what your estimate is likely to be for the three open hearth furnaces?

Mr. Fairhurst.—You mean with buildings, cranes and so forth?

President.—Yes.

Mr. Fairhurst.—I have got all the buildings lumped together but it will be about Rs. 15 lakhs; that is the cost of the furnace parts, the brickwork, and steel work only without erection. These figures have been drawn up by one of the leading steel works designers in the United States of America having full information as to Indian costs.

President.—Rs. 15,00,000 for the three furnaces?

Mr. Fairhurst.—For the furnaces only. That is the f.o.b. American price for the equipment and steel work and castings, etc., then we have the freight and the duty under separate items. The whole steel plant itself built complete would cost Rs. 1,65,00,000, that is including everything.

Mr. Mathias.—That is for an output of 120,000 tons?

Mr. Fairhurst.—Yes.

President.—That estimate was made last year?

Mr. Fairhurst.—Yes.

President.—The whole plant is American?

Mr. Fairhurst.—Yes.

President.—Would you have a continuous rolling mill in this?

Mr. Fairhurst.—No. If you could like to have this scheme to look up I would let you have the whole scheme.

President.—We shall be glad to have it.

Mr. Fairhurst.—There are certain things in this scheme which would have to be modified if we were to launch into making steel.

Mr. Fairhurst.—Yes.

President.—You would not have sufficient scrap for use in your open hearth and that is the reason why the Tata plant has the Duplex combined with the open hearth. It makes more scrap available for the open hearth which they cannot use in the duplex. I do not know yet whether it is going to be economical because they have not been working for any length of time yet, but they claim that in conjunction with the open hearth that is likely to lead to more economical results.

Mr. Fairhurst.—That may be but I do not think a new plant can go in for both open hearth and duplex.

President.—Quite so. You would probably have about 25 per cent. of scrap to start with?

Mr. Fairhurst.—Yes.

President.—Is there any local scrap available?

Mr. Fairhurst.—Nothing worth speaking of. We have tried to buy some for our blast furnaces but we could not get it at a reasonable price.

The period of protection.

President.—How did you understand the present scheme of protection when it was first promulgated? Did you understand that it meant that protection had been given to the Steel industry subject to change in the amount of protection?

Mr. Fairhurst.—I understood that having started it Government would continue it till the Steel industry is on its feet.

President.—You thought that protection was going to be kept for a sufficiently long time or did you think that under the scheme protection might be put an end to after 3 years?

Mr. Fairhurst.—What I understood was that it was not possible to do without protection within three years.

President.—That is not my question. What did you think what might happen after 3 years?

Mr. Fairhurst.—My impression was that things would be as they are. There would be another enquiry when you would go into the thing.

President.—Why did you not start your steel works three years ago?

Mr. Fairhurst.—At that time we had very great difficulty in carrying on our iron production.

President.—Do you think you could have started but for that?

Mr. Fairhurst.—We had very great difficulty in carrying on our blast furnace and coke ovens. We wanted finance.

President.—Now what do you propose the Board should do in order that there may be inducement to some one to start the steel works.

Mr. Fairhurst.—I think the best thing is to grant protection for 10 years to justify anybody putting his money into steel works.

President.—What do you mean by protection for 10 years? Do you mean that the policy of protection and the amount of protection should be fixed for 10 years?

Mr. Fairhurst.—I mean that necessary protection should be given for 10 years. The policy should be stated that the Government intends to give protection for 10 years and the necessary protection might be defined from time to time.

President.—That is to say, if necessary, frequent enquiries may be held as to the amount of protection.

Mr. Fairhurst.—I do not see how it can be otherwise.

President.—How would an ordinary investor look at a thing like that?

Mr. Fairhurst.—I think the Steel Company should be put in the position of supplying figures of their costs and sales. The import prices are always available and the amount of protection necessary can then be defined.

President.—Supposing you call for subscription, what would you have to state in your prospectus?

Mr. Fairhurst.—We would have to state that the Government of India have declared their intention of giving the necessary protection for the Steel Industry for 10 years.

President.—Would that be sufficient?

Mr. Fairhurst.—I should think so.

President.—And you don't mind so far as you are concerned if there were enquiries and the scales of protection were changed from time to time.

Mr. Fairhurst.—I would much rather do without them. I would rather have a definite tariff scale which would adjust itself from time to time according to costs and prices.

President.—How do you mean? The Tariff does not adjust itself from time to time in that sense.

Mr. Fairhurst.—It should be based on the difference between the costs of production and the import price.

President.—In America they don't follow any such stated rule.

Mr. Fairhurst.—They had what I believe they called the " Fordney " tariff which you will understand better than I do. They don't have repeated enquiries.

President.—Supposing protection is found to be inadequate then an enquiry may be necessary. You cannot altogether avoid it, can you?

Mr. Fairhurst.—You can take the information given by the Steel Companies as to the costs of production and the import prices of steel which they have to compete with and I think that is sufficient.

Mr. Mathias.—Don't you think that an annual enquiry by the Tariff Board would make it very difficult for the importers of steel into India to arrange for their contracts from year to year?

Mr. Fairhurst.—It would. It would be very much better not to have enquiries every year.

Mr. Mathias.—Then it may be necessary for you to give your costs every year.

Mr. Fairhurst.—It would. There is one thing of which I am quite sure and that is that you will never get anybody to put money into the steel business unless there is going to be continued protection.

President.—You think that a period of 10 years should be fixed.

Mr. Fairhurst.—It would take an entirely new Company about 7 years to start. It would take them another 3 years to bring down their costs to the lowest possible level.

President.—Supposing we were to make a proposal, say, for 10 years, we have got to make a forecast as to the costs of producing steel in the country and selling it at a reasonable price during that period. Then we have got to make a forecast as to the probable price of imported steel. At present we have got no basis except what we can find on the figures supplied by the Tata Iron and Steel Company with such adjustments as we may make. Would it be sufficient for your purposes if our recommendation was made on our calculations based on the Tata Iron and Steel Company's figures?

Mr. Fairhurst.—Personally I don't see how you can with fluctuating exchanges and various other factors.

President.—We have got to take our chances and you have got to take yours.

Mr. Fairhurst.—I don't think you will get anybody to take any chances in the Steel Industry here at present.

President.—What do you suggest to satisfy a fairly prudent investor that his money was safe?

Mr. Fairhurst.—If you declare that you would give necessary protection to the Steel Industry for 10 years and accept the steel manufacturers' figures for costs and import prices which they have to compete with, then I think it would be sufficient to attract an investor.

Dr. Matthai.—Supposing on a review of these facts that you have been mentioning, we frame some recommendation which applies to Tatas that would be sufficient for any new steel unit that might come into existence in the meantime.

Mr. Fairhurst.—I should think so. I take it that you mean in other words another steel company would produce as cheaply as Tatas.

Dr. Matthai.—That is the assumption behind.

President.—There is one factor which would be taken into account that Tatas have had the lead. Do you think we should make any allowance for that?

Mr. Fairhurst.—I personally think that as Tatas admit themselves they have made mistakes, one would balance the other.

President.—The new man coming in would come in with more up to date plant. He would have learnt by Tata's mistakes and in a reasonable time he may be able to get more or less the same results as Tatas.

Mr. Fairhurst.—The necessary protection on Tata's figures would I consider be good enough for a new comer.

President.—" By necessary protection " what do you mean? Do you want duties or do you want bounties or do you want both?

Mr. Fairhurst.—If I say bounties you will ask me where the bounty will come from.

Dr. Matthai.—Assuming for the moment that there is enough finance for the payment of bounties.

Mr. Fairhurst.—That is a question I would rather like to think over before I make a definite reply.

Dr. Matthai.—You make a suggestion in your note that you want a policy of protection to be laid down for ten years and you want from time to time enquiries made by the Tariff Board as to the necessary amount of protection. Mr. Mathias was pointing out the difficulties with regard to contracts. But supposing you got this protection in the way of bounties and the bounties were varied from time to time there would not be the same difficulty with regard to contracts, would there?

Mr. Fairhurst.—I am afraid I have not gone into it deeply enough. As far as we have gone, it allows us to say only that if we do get protection, we can put up a scheme and I think we could get the money. As to how you are going to provide the protection, we have not considered.

Mr. Mathias.—There is just one point I want to be quite clear about. You say that protection based on Tata's figures would be good enough for another new Company. I take it that in your opinion such protection would be sufficient to cover the 5 years of construction and the period during which production would be below normal.

Mr. Fairhurst.—Yes.

President.—The point we have to consider is this. Supposing we find that Tata's works cost is to-day Rs. 100, that in 10 years it must come down to Rs. 70, and if you are not in favour of any enquiries, then we may have to take some average figure for the whole period. Then to that we add overhead charges and profit. That would remain more or less the same. Supposing the cost of producing steel now was Rs. 100 which was to be worked down to Rs. 80 a ton, and we started with Rs. 90, so far as the new works were concerned, at the outset, they may be at some disadvantage compared with Tatas

Mr. Fairhurst.—Yes, during the first few years.

President.—They will have to work down to Rs. 90 in the first half of the period.

Mr. Fairhurst.—Yes.

President.—When their costs have come down to Rs. 80, they will get a return on the basis of Rs. 90.

Mr. Fairhurst.—They would start with more economical plant than Tatas have. They may produce steel cheaper than Tatas.

President.—We will have to make an allowance for that in these calculations.

Mr. Fairhurst.—I am afraid I have not gone into the figures to say what it would mean.

President.—We must assume that costs would come down.

Mr. Fairhurst.—It is going to take them several years to do that.

President.—We must assume that they would come down. In such a case would not the new comer be at some disadvantage at the earlier stage?

Mr. Fairhurst.—I think he would be in the earlier stage.

President.—Then what do you suggest in his case?

Mr. Fairhurst.—I think in our particular case we will produce steel in 3½ to 4 years. Tatas will not be any more efficient than we are at the end of 5 years, so it would be very much the same thing.

President.—You have not grasped my point. Supposing Tatas are not as efficient as they ought to be compared with the new comer, we have already cut down Tata's costs in order to make them as efficient. Supposing we say that their costs are Rs. 100 to-day, but we feel that a new plant or Tata's plant if properly run ought to produce at Rs. 80. We have already made that reduction which would apply to Tatas as well as to you. In that case until the time your costs come down to the future costs of Tatas what would be the position of your firm?

Mr. Fairhurst.—For the 1st year it would not be in as strong a position as Tatas. As against that you will have a more efficient plant for later.

Mr. Mathias.—Would you consider that as an ordinary risk?

Mr. Mather.—Do you mean that some risk of that kind must be taken if the industry is to develop?

Mr. Fairhurst.—Exactly.

Mr. Mather.—Even if protection were high and continuous a new firm would always have difficulties during the first few years while its plant was being brought to full production and if, as is assumed in the present scheme of protection, protection is necessary, the new firm starting up would have still to face the construction period.

Mr. Fairhurst.—The same as our own company has gone through, is it not?

Mr. Mathias.—You mean that during that period no special protection is necessary.

Mr. Fairhurst.—Everybody expects that in the case of a new plant.

President.—You said the payment of interest during construction would be for 4 years.

Mr. Fairhurst.—Yes.

President.—That would mean you would have to have additional capital.

Mr. Fairhurst.—Yes.

President.—Does this capital of 4¾ crores include 5 per cent. to be paid put of capital?

Mr. Fairhurst.—Yes, it does.

President.—Your first estimate of the Indian Iron and Steel Company's plant was a crore and a half.

Mr. Fairhurst.—Are you going to assume that this is on the same basis?

President.—No, but it is not safe to assume that mistakes made once will not again be made at all.

Mr. Fairhurst.—I think if you were to work these figures into a plant of the same capacity as Tatas compared with the present day costs, you would get figures very near the real value of Tata's plant.

President.—What is the real value of Tata's plant.

Mr. Fairhurst.—You have decided it as 15 crores.

President.—These figures won't work out to Rs. 15 crores.

Mr. Fairhurst.—Very nearly, within a crore.

President.—You multiply your figures by 3 or 4?

Mr. Mathias.—Your figures include working capital?

Mr. Fairhurst.—Yes, but then you would have to increase the working capital with your increased output.

Mr. Mathias.—This estimate of Rs. 15 crores being the value of Tata's plant does not include working capital. But your estimate of 4¾ crores does include working capital.

Mr. Fairhurst.—Yes, but to bring our output to the same as Tatas, we would have to duplicate our blast furnace and coke ovens. We would have to put down 3½ times the steel plant and we would have to increase our working capital considerably and the figure would come to Rs. 14 crores.

President.—For what output?

Mr. Fairhurst.—420,000 tons of finished steel.

Mr. Mather.—These figures of yours are on the assumption that the plant is bought in America at American prices.

Mr. Fairhurst.—Yes.

Mr. Mather.—It does not by any means follow that a new plant if erected would actually be bought in America.

Mr. Fairhurst.—No.

Mr. Mather.—Whether it was designed there or not.

Mr. Fairhurst.—At present we merely have the best information we can get as to the cost. We will have to decide later what part should be bought from America and what part should be bought from other countries. It really comes to about £25 per ton of finished steel.

Mr. Mather.—The figures will need very considerable reduction to arrive at the cost of a plant which is fairly well balanced in proportion to the steel capacity.

Mr. Fairhurst.—That is so.

Mr. Mather.—The adjustments might be fairly large. Your mills are excessive and your blast furnace plant is excessive.

Mr. Fairhurst.—Yes.

President.—No plant can be so balanced that all its units will have the exact capacity required.

Mr. Fairhurst.—I don't think you could have. You must have some margin.

President.—As regards rolling mills for instance, it would be hardly economical to have a rolling mill capacity of, say, 120,000 tons only.

Mr. Fairhurst.—It would not be.

President.—In the case of Tata's formerly they had too much rolling capacity and now they find that they have not got sufficient steel capacity. When they have increased their steel capacity, they may find that they have not got enough rolling capacity.

Mr. Fairhurst.—I think you are bound to have variations in that way.

President.—There must be always a certain amount of margin in some directions.

Mr. Fairhurst.—Yes, there should be plenty of margin in the blast furnaces.

Depreciation.

President.—As regards depreciation, what do you allow in the case of your blast furnaces? Taking the whole thing together, how much would it work out to?

Mr. Fairhurst.—About 4 per cent.

President.—On the whole block value?

Mr. Fairhurst.—Yes.

President.—Does that allow for obsolescence? Supposing the type was found to be out of date, would that enable you to put in a new furnace?

Mr. Fairhurst.—My view of it is that a depreciation fund is for that purpose.

President.—Do you consider that 4 per cent. is sufficient for that?

Mr. Fairhurst.—Yes, particularly in our case in view of the reduction of capital.

President.—4 per cent. on the original value or what?

Mr. Fairhurst.—4 per cent. on the present value.

President.—It is less still then.

Mr. Fairhurst.—As we have written down our capital, we don't need to depreciate on the original figure. I will give you the depreciation that I think is necessary for the different parts of the plant if you like. For instance, in the case of blast furnaces shells, fabricated steel work and so on, it ought to be 2½ per cent. I think that the firebrick linings ought to be taken at 25 per cent. I think the generating plant, blowing engines and boilers ought to be taken at 7½ per cent.

President.—Supposing the block value appreciates, the depreciation fund must find the additional replacement money, is not that so?

Mr. Fairhurst.—Yes.

President.—Do you think that 4 per cent. would find that?

Mr. Fairhurst.—Yes, in our case because we have written down the value of the different parts of the plant to figures which are good figures. They are on the low side.

President.—The idea of a depreciation fund is that after a certain number of years, you are supposed to renew the whole plant.

Mr. Fairhurst.—Yes.

President.—It will take you 25 years on the present figures.

Mr. Fairhurst.—Yes. I think that that is a reasonable life taking the plant as 25 years.

President.—I do not know. I want to know your views.

Mr. Fairhurst.—I think so.

President.—That would keep the plant up to date at all times.

Mr. Fairhurst.—I think that the figure we have taken is just about right.

President.—You may be quite right. Up till now we have not come across a case where they thought that it would be satisfactory to take the life of the plant as 25 years.

Mr. Fairhurst.—We have had the advice of our auditors on this point and they consider that these figures are sufficient. They are people who have had considerable experience of Iron and Steel Works in England and the Continent.

President.—You base your calculations on a depreciation of 4 per cent.

Mr. Fairhurst.—Yes.

Mr. Mather.—Always on the initial value and not on the reduced value?

Mr. Fairhurst.—No, on the initial value.

President.—Does it work out to the income tax rate or is it less?

Mr. Fairhurst.—It is less. We have a surplus now in that way.

President.—That is to say, you take less for depreciation than the Income-tax people allow.

Mr. Fairhurst.—We have been taking for the last few years less than they allow.

President.—Take the case of the Tata Iron and Steel Company for instance. Some of their mills have become obsolete, the bar mills, for instance.

Mr. Fairhurst.—On the other hand I suppose their buildings and such would be there twice as long, that is 30 to 40 years. Electric plant would be good enough for at least 20 years.

President.—It is a very serious thing to depreciate the plant at a smaller rate than would be enough to keep it up to date.

Mr. Fairhurst.—It is rather a difficult thing to decide. It depends in a way on the progress that is going to be made in the next decade in methods of steel manufacture.

President.—We are told that in the case of steel plant there is a tendency to go in for improvements as they come out.

Mr. Fairhurst.—In America it is decidedly so but not to the same extent in England.

President.—You see what the state of the Steel Industry is in England. That may be one of the reasons. Should we follow an example like that in a country where the State spends a great deal of money to put an industry on a sound footing?

Mr. Fairhurst.—I can only give you the figures that we are working on.

President.—If you were to follow the American practice, what would you have to set aside? Have you any idea?

Mr. Fairhurst.—If we were to follow the American practice entirely we would have to take a higher figure than that. There is another thing that affects it. We have a brand new plant and I don't think a new plant will depreciate so much in the first few years.

President.—If it increases the operating cost, it has depreciated a good deal. You can use a plant for 100 years for that matter and it can still work.

Mr. Fairhurst.—You are still thinking of mills. You are not thinking of buildings, etc.

President.—I am talking of the steel plant. We have been examining Tata's works costs, and we find that in the case of the old bar mill for instance the cost is Rs. 25 more per ton.

Mr. Fairhurst.—I don't think that their plant was up to date when they put it in.

President.—Whatever it is, I don't think that their plant is more than 25 years old.

Mr. Fairhurst.—It must have been designed nearly 20 years ago.

President.—You see the result already. Since we last enquired we find that their costs are higher than they should be if the mills were up to date. That is what we are considering.

Mr. Fairhurst.—I think it possible we may have to increase the figure as we go on.

Dr. Matthai.—In your system the ~~same~~ ~~aggregate~~ sum is set aside each year.

Mr. Fairhurst.—Yes.

President.—When you talk of the export trade in steel, what countries are you thinking of?

Mr. Fairhurst.—The only countries I had in mind were Japan and China.

President.—Japan is a protectionist country. It would not allow in any steel, would it?

Mr. Fairhurst.—They are importing very large quantities of steel from America particularly; I am citing America because their selling price is so much higher.

President.—I am not quite sure about that. In any case Japan has the ambition of manufacturing its own steel.

Mr. Fairhurst.—Yes, but considering their lack of raw materials, in Japan, it is a question as to how far they will go towards that ambition.

President.—They of course regard the Steel Industry as a national industry for military purposes and naval purposes, to build their own ships and so forth. I am not quite sure but I was reading an account the other day that whatever happened they must produce certain quantities of steel in the country.

Mr. Fairhurst.—They recently fought very fiercely the question of importations of pig iron but the Government decided against increasing the duty.

President.—In course of time you may have a good market between Aden and the Far East.

Mr. Fairhurst.—Yes.

President.—Including Persia for instance?

Mr. Fairhurst.—I did not have that in mind.

President.—You were thinking more of the Far Eastern markets.

Mr. Fairhurst.—Yes.

President.—With reference to what you say about the monopoly of one firm, would it be any better if there were two firms so far as prices are concerned?

Mr. Fairhurst.—It has mattered in other countries.

Dr. Matthai.—Can you tell me the internal price of pig iron about this time last year? Do you remember at all?

Mr. Fairhurst.—I am not quite sure of the date, but the prices have increased. A year ago the prices for a period only were about Rs. 45.

Dr. Matthai.—This rise started about six months ago, I think.

Mr. Fairhurst.—It started on December 1st, I think.

Dr. Matthai.—The price of pig iron, both internal and export, is really determined by the export market. Supposing there is a bigger demand from Japan or the United States for pig iron, as far as you are concerned that is the thing that really starts the upward movement in prices, does it not? May I put it this way—is there a definite relation between internal and export prices, do they move always in the same direction?

Mr. Fairhurst.—No. For export we have to sell in competition with prices in foreign countries, but the internal price is fixed below the import prices of pig iron.

Dr. Matthai.—Last year one of the witnesses told us that while you had always a lower export price, when the export price moved up the internal price also moved up.

Mr. Fairhurst.—They have no relation now.

Dr. Matthai.—I notice that for two or three years that held good.

Mr. Fairhurst.—Yes.

Dr. Matthai.—These three years that the protective scheme has been in force you have found no reason to complain of the inadequacy of the rates of protection. What is your general feeling? There has been no complaint as regards the measure of protection, but only that the period has not been sufficiently long; is that correct?

Mr. Fairhurst.—Yes. I may say that as pig iron manufacturers now we have not been seriously affected by the protection for steel.

Dr. Matthai.—When you were thinking of having a steel scheme one of the things that operated against it in your mind was that the period of protection was going to terminate in two or three years, but was there a feeling that the rate of protection was inadequate in itself?

Mr. Fairhurst.—No. In our case we were not in a position to go in for steel two or three years ago and from our point of view we never considered really whether the rate was sufficient or insufficient.

Dr. Matthai.—As far as the future is concerned that clearly is your impression that whatever protection we consider sufficient for Tatas will be sufficient for you in case you came into the industry.

Mr. Fairhurst.—Yes.

Dr. Matthai.—I suppose you really consider the period of protection a more important factor than the rates. If there was some variation in the rates, that was not so important a thing from the point of view of possible investors as the fact that the principle of protection held good for a sufficient period.

Mr. Fairhurst.—I think protection would have to be guaranteed for 10 years before we could start making steel in India.

Dr. Matthai.—If it takes you five to seven years to organize your plant there are only three years of actual working during which you would get the benefit of protection.

Mr. Fairhurst.—In our case we would produce steel in 3½ to 4 years whereas a new plant would take seven years, so that the period of 10 years would give us at least five years' protection.

Kind of steel products.

Dr. Matthai.—You were talking of the products which you might manufacture in case you went in for making steel. What is your opinion about this? Would it not be necessary, in case you were really going to have a very big steel industry in India, to develop the bazar market as there are very big potentialities in that direction? At present the Tata Iron and Steel Company are mainly producing for Government and semi-public requirements.

Mr. Fairhurst.—In the sheet market about 90 per cent. of sheets go into the bazar.

Dr. Matthai.—Don't you think there would be almost an equally big bazar trade in bars?

Mr. Fairhurst.—I think it would be a very sound thing to have a light merchant mill as well as a sheet mill to supply the bazar trade.

Dr. Matthai.—Is it not important from the bazar point of view to keep the prices as low as possible? The bazar wants cheap things, not necessarily good things.

Mr. Fairhurst.—I think it is. I think it would pay us to sell as cheaply as possible. There is also this to be considered from the point of view of sheets that you have a far bigger market to go in for than you have in anything else.

Dr. Matthai.—You mean that practically all the galvanized sheets consumed in the country come from abroad.

Mr. Fairhurst.—Take March for instance. During that month about 45,000 tons of galvanized sheets were imported into India, so that it is the best market to go in for.

Dr. Matthai.—I was thinking that there was this difference between sheets and bars that, as the President pointed out, it requires considerable experience and skill to make sheets to enable you to compete with imported sheets.

Mr. Fairhurst.—It has been proved possible to make tinplate out here and if we can do that I think we can make sheets.

Dr. Matthai.—It has been a great risk.

Mr. Fairhurst.—Yes, but it has been proved possible.

Dr. Matthai.—There is just one other point. About three years ago when the Steel Industry (Protection) Act was passed one great handicap as far as the steel industry was concerned was that the Indian exchange, not merely Continental exchange, was unstable, and it was that uncertainty which was one of the most important factors that led to the depression. Supposing we are going to have a stable exchange hereafter as a result of the Currency Commission's recommendations, one big uncertainty would thereby disappear, don't you think so?

Mr. Fairhurst.—Yes, but it looks as if the rate at which it is going to be fixed will not be as favourable to us as 1*s*. 4*d*.

Dr. Matthai.—As a matter of fact the higher rate has been in force since 1924 and things to some extent have adjusted themselves, so that by the time you are in full operation three years from now, whether the rate was a higher rate compared with 1924 would hardly matter. The possibility of a stable exchange is distinctly a circumstance in favour of the Steel industry, is it not?

Mr. Fairhurst.—Yes. All these figures and estimates of construction of the plant are useless unless we have a stable rate and we have taken 1*s*. 6*d*.

Price of Coal.

Dr. Matthai.—The statement you made about the price of coal, is that the general impression of business people here?

Mr. Fairhurst.—People in the coal trade are of the view that prices are not going to increase for the next two or three years.

Dr. Matthai.—If there was some possibility of Indian coal recapturing the export market?

Mr. Fairhurst.—Even so the amount we can export is so small in proportion to the raising capacity that I don't think that prices will increase at least in the next two years.

Price of pig-iron in India.

President.—The other day we had a complaint that owing to the price of pig iron being fixed more or less at the import price basis some of these people who go in for castings are at a distinct disadvantage now as compared with the foreign manufacturer because formerly they could get their pig iron cheaper.

Mr. Fairhurst.—They got it cheaper only for a short period.

President.—In that period the industry was largely built up and now the position is that they are not able to compete.

Mr. Fairhurst.—I don't think it is correct to say that the industry was built up during that period, because it was a very short period of not more than one year that pig iron was selling at such low prices, in 1923 and 1924 pig iron was selling out here at over Rs. 80 a ton.

President.—And the price of foreign castings would be higher in proportion. What has happened is this that the price of their pig iron has come down and yours has not.

Mr. Fairhurst.—Ours has come down much the same and came down lower owing to the competition among the producers here and for other reasons.

President.—In other countries the subsidiary industries get some concessions from the producers of their raw material.

Mr. Fairhurst.—This complaint has come from people who have taken to sleeper manufacture for the railways at the time when sleeper prices were high and the price of pig iron was low in the country. That business prior to that period both here and abroad had always been in the hands of pig iron manufacturers. It is really as essential for the pig iron manufacturer to make this type of casting as it is the steel makers business to make ingots into finished steel. As I said, prior to that period they never made these sleepers.

President.—I think it is a point which may be considered by the manufacturers of pig iron whether it would not pay them to quote a price at which they can compete against foreign manufacturers.

Mr. Fairhurst.—We have always been willing to do so. There is no case that I know of where foreign castings have come in because we had not met the foundries by reducing our prices. No iron sleepers have been ordered from Home on the ground of the complaints that you have heard.

President.—They have brought foreign steel sleepers.

Mr. Fairhurst.—What actually happened in this case was that the orders were placed for the sleepers with the Bengal Iron Company who were materially able to get their pig iron cheaper, and I think the complaint was from people who were unable to quote a lower price for them.

Dr. Matthai.—Since you started operations has the margin between the export and internal prices ever been bigger than it is now?

Mr. Fairhurst.—When we first opened up the Japanese market we were selling pig iron to Japan at a price of, I believe, Rs. 28 f.o.b. Calcutta and the prices in Calcutta then were somewhere between Rs. 45 to Rs. 50.

सत्यमेव जयते

2. MESSRS. BIRD AND COMPANY.

A.—Written.

(1) *Representation, dated the 15th May 1926.*

In November 1923 Mr. E. S. Tarlton gave evidence before your Board on behalf of Messrs. Bird and Company, as representing the United Steel Corporation of Asia Limited. But, already, before that time the Directors of the Company had decided to suspend operations because the prospects of raising capital for the scheme in the then state of the money market were unfavourable.

It was thought that the enquiry into the question of protection to the Steel Industry would result in measures of protection, either by bounties or duties, being provided for a number of years, and that such a decision by the Legislature would produce favourable conditions for the flotation of a new Steel Company equipped with modern up to date plant.

But the short term put to the Steel Industry Protection Act (XIV of 1924) combined with the rise in exchange and the drop in prices of imported steel have made it impossible to regard the market conditions as favourable at any time during the two years since the Act was passed.

The subsequent enquiry by the Tariff Board in July/September 1925 and their recommendations which brought about further supplementary protection for steel in the form of a bounty on ingots was of no assistance towards a new Company, because the additional benefits will expire with the original assistance, that is, at the end of March 1927.

The Tariff Board have notified the opening of further enquiry under Clause 6 of Act XIV on the question of the continuation of protection for the steel industry, and we submit this note in response to their announcement.

The estimates for the Tuscal Scheme were prepared in 1922, we have not had the figure revised since then. Before the scheme could be brought forward every detail of Capital cost and working expenses would have to be re-examined, and full advantage taken of the latest developments in plant and machinery for the manufacture of steel. But in view of the reduced prices at which machinery and structures are being sold as compared with 1923 we contemplate that the Capital cost of the Steel Works would be considerably lower than our original estimate.

Also we should expect to save some Rs. 46 lakhs in capital outlay on coal mines and limestone quarries, because we should arrange long term contracts for coal and limestone based on a sliding scale according to the world price of pig iron. We should be able to do this on good terms through concerns which are working under our control.

We regret we are unable to give details now of revised figures of initial expenditure and working costs, as it would be impossible without a complete re-examination by our Technical Advisers at home, but we know that the Tariff Board have at their disposal much information on the possible reductions in prices of the raw materials in India and on the lower costs at which the Tata Steel Works expect to manufacture. Also the Board are fully aware of the continuance of the competition of imported steel due to the fall in prices of both British and Continental materials. Thus they are in a position to judge of the need for protection or otherwise, without receiving revised details of a problematical scheme.

For our part we are satisfied that there is a market in India for the output of another Steel Works, we are satisfied as to the ample supply of all the raw materials, we know that India cannot make full use of her vast resources of high grade iron ore without the erection of further Steel Works, and it has been shown at Jamshedpur that Indian artisan labour can be trained to work on furnaces and Mills.

Therefore the one thing wanting for new works is a reasonable prospect of financial success.

Our intention with Tuscal was to make it an Indian Company, with Rupee Capital, and a directorate in Calcutta with a proportion of Indian Directors and this would be obligatory under Act XIV of 1924, but whether the Company was floated in the United Kingdom or in India the success of the flotation would entirely depend on the measure of protection ensured for the Company's output.

Our financial advisers in India explain the situation thus. The money market is tired of ventures in Iron and Steel. Large Capital losses have accrued to individuals from the present depressed prices of stock in such concerns. The big investors are not attracted by a proposition that will pay no interest at all during four years of construction, or will pay perhaps some small rate out of Capital. The fact that Government paper and such investments have lately risen in India to an unprecedented figure points to there being large sums of money available for investment, but is by no means an indication that such money would be invested in a big industrial venture like Steel Works unless the financial success of the Company was very solidly assured.

We agree with these views and if the Board desire to obtain confirmation of them they will doubtless take the necessary steps to obtain further evidence on this aspect of the problem.

As regards the measure of protection necessary to assure financial success we do not propose to give detailed figure, these could only be estimates such as were given in 1923, and as already stated revised figures would necessitate the re-examination of every detail of the Tuscal scheme, whereas the Board will have before them actual figures from the Jamshedpur works, showing the reduction in production costs which have been affected by increased output, new plant, lowering of the price of raw materials and stringent economies in every branch of production. The measure of protection required to assist the Tata Steel Works would be sufficient for new works such as Tuscal even on the smaller output contemplated in the first stage of our scheme.

But when the period for the duration of protection is considered, we are on an entirely different footing to the Tata Steel Company. The Tariff Board and the Government of India also through the Legislature, may consider it suitable to carry on the protective policy by short periods such as three years, insisting that the subject shall be re-examined again towards the end of such period, again be re-voted upon by the Legislative Council.

Such a policy would be of no use for a new Company. It would require approximately 4 years to construct new steel works from the time of starting, and 6 years for them to be working in full swing and under the advantages of full output and smooth organisation, therefore a duration of protection for at least 8 years would in our opinion be necessary to secure success in putting the scheme upon the market. We are confident that a fixed period of 10 years would insure the financial success of our scheme, and 8 years might make it possible, anything less would be useless.

The question therefore becomes this, does the Indian Legislature desire to see India profiting from its mineral resources and pushing ahead with the production of its own steel, and if so, will it grant the protection necessary?

We wish to be most emphatic that on the answer to this question depends the formation of another Steel Works. Without a guarantee for a long period a flotation would meet with no success.

We have thus announced our views on the broad question of policy. If the Tariff Board desire any further information in the form of oral evidence, we shall be very pleased to attend.

(2) Letter from Messrs. Bird and Company, dated the 25th August 1926.

In accordance with the request contained in your letter No. 630, dated 13th August 1926, we have the pleasure to return corrected as carefully as possible a copy of the record of evidence tendered by ourselves before your Board on August 5th, 1926.

The President asked if we could provide some actual figures showing a comparison of prices for identical types of machinery as between 1923 and the present time. We have looked up our records and we send you such information as we think may be useful. The first portion of the attached statement refers to Jute Mill Machinery and gives prices between the years 1921 and 1925 from actual orders and supplies. The second portion dealing with a three-throw pump is not such conclusive evidence as the first lot of prices, but that is partly because the Motor was not identically the same.

We should be very much obliged if, provided the President has no objection, you would send us two rough proof copies after printing of the oral evidence for our record.

BIRD AND COMPANY.

Jute Mill Machinery.

	1921.	1922.	1923.	1924.	1925.
	£ s. d.	*£ s. d.*	*£ s. d.*	*£ s. d.*	*£ s. d.*
Down Striker Breaker Card	820 9 4	...	...	...	454 15 9
Down Striker Half Circular Finisher Card.	871 16 4	...	...	...	483 10 2
Up Striker Finisher Card .	945 13 6	...	...	...	560 7 8
Push-bar Drawing Frame .	...	...	405 5 5	...	248 4 8
Roving (64 Spindles) . .	1,407 2 10	...	1,012 6 5	...	779 10 8
4″ Spinning Frames (176 Spindles).	1,112 16 5	911 4 10	876 3 9	...	641 17 9
6″ Spinning Frames (140 Spindles).	...	1,080 12 6	...	817 4 9	752 2 3
1-ton Electric Hoist . .	...	440 10 0	...	376 7 0	...
Engineering Machinery.					
Horizontal 3-throw Pump, 4½ × 6″.	...	...	162 0 0 f.o.b.	...	150 0 0 f.o.b.

MESSRS. BIRD AND COMPANY.

B.—Oral.

Evidence of Sir GEORGE GODFREY, Kt., and Mr. A. E. BENTHALL, recorded at Calcutta on the 5th August 1926.

Questions relating to the establishment of new steel works in India.

President.—You represent Messrs. Bird and Company on behalf of the United Steel Corporation of Asia, Limited.

Mr. Benthall.—Yes.

President.—Is that Company still in existence?

Mr. Benthall.—Yes.

President.—I think since we last met, no progress has been made.

Mr. Benthall.—No. We brought the concern to a state where we were not able to get finance, so we put it into cold storage.

President.—Was it due to the fact that it was understood that the scheme of protection was intended to last only for three years?

Mr. Benthall.—Yes. Tatas themselves were not doing very well. There is no interest in India in investing money in steel.

President.—But I understood that Cammel Lairds were the people who were largely interested in this new Corporation.

Sir George.—Yes, they worked out the technical details for us.

President.—Are they still interested in it?

Sir George.—Yes.

President.—You have got no recent figures as to what the plant would cost.

Sir George.—No.

President.—At that time I think we were told it would cost about Rs. 15 crores for an output of 450,000 tons. That is including the collieries, I think

Sir George.—Yes.

President.—You say "But in view of the reduced prices at which machinery and structures are being sold as compared with 1923 we contemplate that the Capital cost of the Steel Works would be considerably lower than our original estimate." It is true that prices have dropped but if you were talking of American prices and if you contemplated going in for an American plant such as that of the Tata Iron and Steel Company mainly is, then I think the drop there has not been as great as it has been in Great Britain. It all depends on what sort of plant you wish to go in for.

Sir George.—It is almost certain that in this scheme we would go in for an English plant with the latest improvements, gathered during recent years since the war.

President.—It is for your experts to advise you. I cannot say anything except this that when a plant has been tried in the country and it has succeeded, if I were going in for similar manufacture, I should certainly copy as much of that plant as I could.

Mr. Benthall.—Cammel Laird's Managing Director and Technical Expert came out here. We also had the benefit of advice from the late Dr. McWilliam as regards the design of the plant and all those considerations were taken into account. To get out present day costs for the plant means a great deal of work.

President.—Mere quotations would not be reliable. It is quite a different proposition when you ask a man to quote when he knows you are not meaning actual business. The total will be too high.

Mr. Benthall.—That is exactly what happened. We went on keeping the figures up to date until the manufacturers got tired of it.

President.—You must have been buying considerable quantity of machinery in your other departments.

Mr. Benthall.—Yes.

President.—Can you give us some idea as to the drop in prices? What sort of machinery do you import?

Mr. Benthall.—Jute mill machinery, colliery machinery, etc.

President.—Taking the same types can you give us more or less comparable prices between 1923 and now.

Mr. Benthall.—Yes.

Sir George.—I think it is difficult to make comparisons. We may not buy exactly the same class of machinery.

President.—There are some standard articles, for instance, electrical motors. It is simply to get some sort of idea as to really what is taking place.

Sir George.—We will look up some actual figures* and send them.

President.—Since we last reported there has not been any serious alteration in the market. Probably as regards quantities the market is a little bigger than before. As regards the kind of steel for which there is a market in some respects it has contracted for the kind of steel which is manufactured by Tatas. For instance, take rails, their production when it reaches full output, would practically be equal to the whole of the demand. Then in the sheet mill they do not make enough sheet products. Taken as a single item galvanized corrugated sheet is the biggest item that is available in the markets so that the plan that you showed us formerly may not be applicable now.

Mr. Benthall.—I don't quite follow that. The sheet business has increased very much.

Mr. Mather.—The sheet market is the principal market. Of course there is always a market for a variety of bars, but as regards plates, for instance, the Tata Iron and Steel Company has got a mill which can produce several times the quantity of plates required at the present moment.

President.—What I mean to say is this. The cost of a plant would very largely depend on the kind of equipment that you have to have.

Mr. Benthall.—Yes.

President.—That is a point worth considering. We are trying to get some information as to what kind of products the new plant ought to go in for and what would be the cost of erecting the plant to produce them. If you went entirely by the Tata Iron and Steel Company's plant, you might get a plant which would produce the same products.

Mr. Benthall.—We might produce the same products. The potential market was taken into consideration by our Technical Advisers. When we are really getting out a fresh scheme, we will review the whole again. It is impossible for us to say what they would recommend. It is a matter of money.

Mr. Mather.—On page 173 of the evidence (Volume III, First Steel Enquiry), you state that the initial plant was to comprise mills to cover all British standard sections and sheets.

Mr. Benthall.—Yes.

President.—It is only a point that struck me. In that respect it may perhaps require a considerable revision. Your experts will no doubt see Tatas programme and the present programme of the extensions as far as they have got it.

Mr. Benthall.—Taking the import figures there is an ample margin for another works. We may be competing on certain lines, but we should in our own interest try to work on the lines where the margin is ample.

President.—The Indian Iron and Steel Company are also contemplating the construction of a steel plant.

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* See page

Sir George.—You said that Tatas output of plates would be 100,000 tons a year.

President.—Yes, their mill could produce that quantity.

Sir George.—What are your figures of the requirements of India? Are they not very much larger?

Mr. Mather.—They are very much less. We are talking only of plates.

President.—At the present moment there seems to be a tremendous demand for galvanized sheets in this part of India. It is difficult to say whether the demand would remain at that level or increase.

Mr. Benthall.—I think there would be a temporary drop with the lower price of jute.

President.—Jute mills hope for a lower price for jute. It is rather too early to say.

Mr. Benthall.—The price is about half at the present time of what it was last year.

Mr. Mather.—Eastern Bengal is not the only district which uses a large quantity of galvanized sheets.

Mr. Benthall.—It is quite the biggest individual market.

Mr. Mather.—It is possible that increasing quantities may go to the other markets.

Mr. Benthall.—We import a certain amount and most of it goes to Eastern Bengal.

Dr. Matthai.—If the demand from Eastern Bengal was low, it would make a big difference in the whole consumption in the country.

Mr. Benthall.—Yes.

Mr. Mathias.—Can you tell me whether the demand expands very readily on a reduction of price?

Mr. Benthall.—I should think so, but I should say so far as India is concerned, it is more a question of the monsoon and profits.

Mr. Mathias.—Is it merely a question of crops?

Mr. Benthall.—I should say so. The ryot invests in galvanized sheets when he has got surplus funds.

President.—Supposing the scale of protection was so fixed as to be remunerative, how long do you think you would take to start the works, that is to get it going?

Sir George.—To start the works?

President.—To get it going.

Sir George.—It would certainly take 3 or 4 years to construct the plant.

President.—I mean when would the Corporation start manufacturing. We know that it would take 4 years after you start. We want to know what are the intentions of the Corporation. Are you serious about going in for steel manufacturing?

Sir George.—I think that once we started it would take about a year to revise the figures entirely and to get more up to date information before we put it on the market. So we may say it would take about a year.

President.—I was rather interested in knowing whether you were seriously contemplating the manufacture of steel in the country.

Mr. Benthall.—Certainly. We have spent much money and time in selecting sites, acquiring raw materials, etc.

President.—Last time we went fully into the question about your raw materials. Has the position materially changed since then?

Mr. Benthall.—No.

President.—You have got the whole of the raw materials?

Mr. Benthall.—Yes. We have developed the supply of manganese since then.

President.—I think that when you were giving evidence 3 years ago, you had not actually acquired a site for the works. Have you done that since?

Mr. Benthall.—No. We had an option on one for a certain time but when it became apparent that Tatas were going downhill, and that we could not get our capital, we had to drop the option. We have two alternative sites. The catchment areas have been surveyed and geologically examined. We are ready to go ahead with the site.

President.—All your raw materials would be within a radius of 150 miles.

Mr. Benthall.—Yes.

President.—Has the site been changed?

Mr. Benthall.—It has not been changed exactly. The sites are all within a few miles of each other.

Mr. Mather.—You gave us two alternative tables of distances of raw materials from the site, see page 173, Volume III, of the Evidence, First Steel Enquiry, 1924.

Sir George.—Yes, there was a note on distances of the raw materials from the proposed site of the Works and there was a revised figure for the same subject to certain railway construction. The distances under the latter are:—
Coal—168 miles; iron ore—53 miles; Limestone—50 miles and Manganese ore —53 miles.

Mr. Mather.—I suppose that the railway has not yet been constructed.

Mr. Benthall.—No.

Mr. Mather.—Probably it would not be, unless you started with your scheme.

Sir George.—Even then it would not I think be made because it would be too expensive for the traffic it would draw.

Mr. Mather.—I presume that you expect to get similar railway rates for the conveyance of minerals to those of the existing companies.

Mr. Benthall.—Yes.

President.—I see that you don't want to go in for collieries.

Mr. Benthall.—The stumbling block would be the capital required.

President.—What is the position as regards the price of coal at the present moment? Do you count on a rise in the price of coal in the near future?

Mr. Benthall.—There will be no rise next year but thereafter there may be, due to collieries going out of operation.

President.—The Railway collieries are increasing their output.

Mr. Benthall.—Yes.

President.—Supposing they developed, in that case the total output may not be reduced in spite of some collieries closing down.

Sir George.—You are considering the immediate future. After a couple of years or more the production of the Railway collieries may be absorbed, the consumption of coal, and the demand for it will not stand still.

President.—As far as I remember they expect to run up to about 6 million tons in course of time.

Sir George.—Yes, in about 5 years.

Mr. Benthall.—The consumption of coal will be considerably more.

President.—There are other forms of fuel coming in.

Mr. Benthall.—There is a certain amount of oil coming in.

President.—And more electricity on the Bombay side.

Mr. Benthall.—But many industries have had a set back. Take for instance the jute mills. They are only working four days a week.

President.—And of course two more steel works would absorb a large quantity of coal.

Sir George.—That would make a big difference straightaway. Another steel works would take about 500,000 tons. Tata's consumption is much more than that. Thus it would be a material benefit to the country at large if there were more steel works.

Mr. Benthall.—We see no prospect of improvement for second class coal.

President.—Second class coal does not count so far as the Steel Industry is concerned.

Mr. Benthall.—No.

President.—There is one point about coking coal. We do not know for certain what the quantity of coking coal is in the country. If it is a fact, as has been alleged by some persons, that coking coal is largely used for other than metallurgical purposes, coking coal may in course of time be exhausted long before iron ore is exhausted. Can you give us any idea as to the quantity of coking coal that is used by railways and industries generally?

Sir George.—I am afraid not. The best authority on the subject will probably be the Chief Mining Engineer to the Railway Board. Any information that he may give will be of value. But there is a great deal of coking coal which has not yet been disclosed or worked.

President.—We should like to know at what rate coking coal is being used for purposes other than metallurgical.

Sir George.—So far as we are concerned, we have virgin supplies for our full output.

Mr. Benthall.—We have virgin supplies which would last us 100 years in Central Jheria, the South Katras areas which have not been tapped at all Of course they are rather deep areas to work at present.

President.—Now as regards the flotation of the new company, what period do you suggest during which protection should last?

Sir George.—10 years.

President.—That is to say the policy of protection as well as the amount of protection must be fixed for ten years, or would it be sufficient if the policy of protection was fixed, the amount of protection being liable to revision as the case may be? The amount may be increased or decreased but it would be fixed with reference to the requirements of the industry.

Sir George.—The second alternative would I think be sufficient.

President.—So far as duties are concerned you cannot really have a sliding scale because it would mean the upsetting of commercial transactions and so on. If I know that the duty is going to be increased next year, I would import large quantities this year. Obviously, that cannot be done.

Mr. Benthall.—Exactly.

President.—What I mean is this. Supposing the Government lays down the principle on which protection is to be granted and says for instance "It shall be the difference between the foreign price and the reasonable fair selling price of the industry" and then it says that there may be an adjustment during the period, provided you get reasonable amount of protection at every stage.

Mr. Benthall.—It would be rather difficult to frame such a scheme. We should prefer to have fixed figures on which to base our calculations.

President.—Your contention is that it should be definitely fixed for a period of years.

Mr. Benthall.—It would be convenient for a new concern if it were fixed.

Dr. Matthai.—Supposing we arrive tentatively at an estimate of what would be a fair selling price for Indian steel—let us say Rs. 150 a ton or something of that kind. During the period of protection we keep that estimate but we simply vary the amount of protection in such a way as to suit the circumstances of the industry.

Mr. Benthall.—So that if the price of foreign steel is Rs. 100, protection would be Rs. 50 and if it rises to Rs. 145, it would be Rs. 5 only.

President.—Supposing the price of steel went up by about 50 per cent. in the next ten years and the protection became excessive, there might be objection on that ground.

Mr. Benthall.—We should not reckon on our expenses going up and therefore it would be better to have it fixed.

President.—This is purely for discussion. What the industry would require would be an assurance that within this period, if a period is fixed, it gets the amount of protection which would enable it to compete against the imported article. That is all that is needed. So long as you get that, you think that you would be able to get capital?

Sir George.—That would meet the case.

Dr. Matthai.—Could you tell me from the point of view of the effect on business generally? Supposing we had a scheme of that kind for a period of 10 years, and supposing we also had an arrangement by which periodically there was a general revision of the duties but a constant figure of protection, what would be its effect on contracts, etc.?

Mr. Benthall.—The effect would not be serious.

Dr. Matthai.—The duties might vary from time to time. Would that unsettle the business?

Mr. Benthall.—Not to a great extent because you would look to the imports decreasing considerably. With new works starting in the country, the imports should decrease.

President.—I will put it to you this way. We make an estimate to the best of our ability and we say that for the next ten years the fair selling price is Rs. 150—that is not altered—and we start with a duty that would give the Indian industry that price and right through the period the duties are varied merely to adjust the foreign price to that price that we have fixed, would not that be a sufficient guarantee for you?

Mr. Benthall.—I think so.

President.—We have to venture on some estimate. We must get an estimate that would not only enable the industry as it exists to-day to go on but enable it to expand, and with reference to that we should fix a price which the Indian consumer has to pay and which the industry has to receive. Then, if it becomes necessary to increase the duty, it is increased. On the other hand if it is found that the duty has become excessive, it may be reduced. There is that element of uncertainty to some extent and people may speculate when they think that the duty is going to be altered. That may happen every year.

Mr. Benthall.—You would have to fix the selling figure.

President.—They know that they would have to pay Rs. 150 or whatever the amount is, so that the speculation would be within limits.

Mr. Benthall.—Yes, but the alteration of the fixed figure would be much more serious.

President.—Every year people do speculate during the budget time on things like tobacco where the duty is liable to variation. Do you think that it would lead to serious fluctuations if a system of that kind is adopted?

Mr. Benthall.—I don't think so.

Mr. Mathias.—In a system of that sort, during the course of the year if you saw that the price of imported steel was falling, you would naturally conclude that there would be a variation in the duty at the end of the year. If that was so, don't you think that the effect on the duty might be anticipated by a large import of foreign steel.

Mr. Benthall.—Quite possible.

President.—If there was much speculation, Government might pay a bounty in that year. That would be a rap on their knuckles if they speculated on any large scale. That was what happened in the first supplementary enquiry.

Mr. Benthall.—As that would adjust itself in the following quarter, it would not affect us much.

President.—It might affect possibly the merchant.

Mr. Benthall.—Yes.

President.—Before budget time when duties are changed, some people expect a rise in the duty and import in large quantities. If they expect a fall, they wait and see. If Government don't fix any particular time, then there would not be much room to speculate.

Mr. Benthall.—Exactly.

Sir George.—It is a risky thing for importers to do and they got very badly hit in 1922.

President.—They got very badly hit during our first scheme. Before we reported they imported large quantities of steel; they did not come in time and when they did come, they had to pay the duties.

Mr. Mather.—I take it that your Company, *i.e.*, the Steel Corporation, is fairly confident of producing steel at a price as low as that of the Tata Iron and Steel Company?

Mr. Benthall.—We hope to go lower as we shall have profited by their lessons.

Mr. Mather.—Therefore if the Board considered and gave good reasons in its report for believing that the manufacture of steel in India could either now or within a short period be carried on satisfactorily without protective duty do you think that would be sufficient to enable you to raise capital on the basis of your calculations that you could make steel at a lower price?

Mr. Benthall.—I think not, in order to enable us to do that it is essential that Tatas should be in a flourishing condition. No investor would put in any money if he found that the only shining example is not making any profit. They would like to see the prosperity of Tatas on a sound basis. Anyhow we are against a short term period of protection.

Mr. Mather.—Supposing we found that no protection was needed, do you think that would prevent your scheme coming into operation?

Dr. Matthai.—Supposing the proposition was this—Government declares that the Steel industry should receive protection for ten years but the present scale of protection—Rs. 20 or 30 whatever it may be—will last only, say, to the end of 1930; whatever may be necessary afterwards would have to be decided as a result of fresh enquiry. Will that give investors a sufficient sense of confidence?

President.—The main thing I take it from the point of view of the industry must be that it should get a fair selling price so long as it needs protection. That is what you require and subject to that condition I take it, it does not matter to you what form protection takes and whether the amount varies or not?

Mr. Benthall.—We must show our shareholders definite figures. If you put a fixed tariff on for four years only, we should be just producing if we started to-day, so that at the end of the four years we shall not know what it will be.

President.—The thing would be to fix a figure that would be an inducement to you to bring your costs down to that figure and secure you a profit for the whole period. Supposing, for example, we fix Rs. 150 for the whole period it may so happen that you might require Rs. 170 in the first year, but the scheme would contemplate that at the end of the tenth year you may do with Rs. 100 only, and then you might get an average of Rs. 150. Supposing a flat rate is fixed you cannot expect to work up to that at the beginning because if you did in that case the amount of protection would be excessive. That element has to be taken into account in any scheme, where you fix the price for a long period.

Mr. Benthall.—We have not considered it from that point of view.

President.—I want you to understand it. Supposing you get a scheme for ten years; and you have got to get Rs. 150 per ton on an average. But in the first year you get Rs. 120, the next year Rs. 140 and so on.

Mr. Benthall.—The question is whether the market will rise or fall.

President.—In making our calculations we have got to bear that in mind. So long as the scheme provides that in that period you should realize such a price, can you suggest any way by which you can start with a fixed price which would be carried on for the whole period?

Mr. Benthall.—So that there would be no fall in the rate?

President.—The rate is so fixed that during that period you would realize an average; you may realize more but you must realize at least that average. That is the idea of the scheme.

Sir George.—Do I understand that it would be altered during the period?

President.—The price will not be altered. It may be a lower price than that which might pay you in the first year or two, but it would be a higher price than you would require for the remaining period.

Mr. Benthall.—It would introduce a new element in our calculations. It would suit us in a rising market, but it would be against us in a falling market. Supposing for the first five years steel makers received Rs. 170, they might receive Rs. 120 for the remaining period.

President.—The scheme contemplates that the tariff has to be so adjusted that if there is a drop in the price the duty goes up.

Dr. Matthai.—In a falling market you get more duty and in a rising market you get less but the price of Rs. 150 remains constant.

Mr. Benthall.—That seems a good proposition.

President.—Would not that be better than frequent enquiries, where both prices are liable to be changed. It is much better for the industry to be told what it is going to get.

Mr. Benthall.—That is what we want.

President.—As regards fixing the fair selling price, do you know the principle on which we work? At present we have got to go on the cost of the Tata Iron and Steel Company, then we say these are the costs to-day and if their practice improves in such and such directions they ought to bring down their costs so much; then we say they must get so much for overhead charges including depreciation, head office expenses and interest on working capital. Then we say the concern would require such and such capital and we fix a return on that. The total of the three makes the fair selling price. We take that and the difference between that and the foreign landed price of the product is the measure of protection. In fixing that the most important thing is the amount of return that a new industry should expect, and I should like to have your opinion on that.

Mr. Benthall.—10 per cent. on ordinary capital, but we would average it as 8 per cent.

President.—That is what we gave to the Tata Iron and Steel Company. We took the actual rate at which they had raised the other money we gave 10 per cent. on the ordinary capital, and that made an average of 8 per cent.

Mr. Benthall.—That is right. That is what we gave in the case of paper, I think.

President.—You think an average of 8 per cent. is about what would attract capital?

Mr. Benthall.—I think so. That means more for ordinary capital.

President.—How about the intermediate period of four years, during which the company won't pay?

Mr. Benthall.—We originally contemplated paying interest out of capital only to attract money.

President.—The other day I think Mr. Fairhurst giving evidence on behalf of the Indian Iron and Steel Company, Limited, told us that he would be satisfied with a return of 8 per cent. Then he said for the first four years he would expect to give interest out of capital at 5 per cent. If you calculate on that basis Rs. 100 becomes Rs. 120 roughly. If the whole amount of capital was spent it works out to 9·46 on that basis.

Mr. Benthall.—In actual practice I don't think you can lay down that such and such per cent. will be attractive. If the prospects are good enough then money will come. You can't lay down that at such and such a rate you can get money at par.

President.—What probably happens is this. You first raise your capital—a small percentage, say, 30 per cent.—and if you do well on that then the next lot of capital you may raise at a cheaper rate, but in the end it may work out at 8 per cent. on an average.

Mr. Benthall.—That is so.

President.—For ordinary capital you would have to offer at least 10 per cent.?

Mr. Benthall.—Yes.

Dr. Matthai.—On the whole you take the line, don't you, that whatever protection we gave to the Tata Iron and Steel Company you would consider sufficient for a new industry?

Mr. Benthall.—Yes.

Dr. Matthai.—That is your general position. If as a result of our enquiry we say so much is a fair rate of protection for Tatas, you would be prepared to accept that as sufficient for you?

Mr. Benthall.—Yes. The psychology of the investor is such that he will never put in money until he finds that other people are making money.

President.—That means that before he puts in any money he would look round and see whether the Tata Iron and Steel Company were making any money?

Mr. Benthall.—That is right.

Mr. Mather.—In the case of an industry which takes several years to develop the best time to start is during a period of depression, is it not, because you can buy machinery more cheaply and by the time you are beginning to get output you may be out of the period of depression?

Mr. Benthall.—There is only one man in a hundred who looks at it from that perspective!

President.—Is it the practice now-a-days in India to pay interest out of capital?

Mr. Benthall.—I don't think it is. I don't think it has been done except in concerns like the railways, but not in other industries.

President.—I have been reading some recent prospectuses of Companies and I find that none of them promise to pay interest out of capital.

Mr. Mather.—It is not a serious factor except in the case of an enterprise which takes several years to mature as this one does.

Mr. Benthall.—Yes.

President.—What is the rate of interest that you would give?

Mr. Benthall.—4 per cent. I think that is the maximum that is allowed, but we don't by any means assert that that will be necessary.

President.—Would the control of this Company remain in India? It really doesn't matter, so long as the industry is established? But there is a feeling in the country as you know that the control must be in India and Indians must have a considerable amount of interest in the concern.

Mr. Benthall.—We would like Indian capital, but that depends on the success of Tatas and the protection given.

President.—In the other industry we enquired into, you were able to say that a substantial amount was subscribed by Indians.

Mr. Benthall.—Yes.

President.—When the money is theirs, it is only natural they feel that they should have control over the affairs of the Company as a whole.

Mr. Benthall.—We take Indians on the Board of Directors.

President.—The question becomes important when the Government gives protection by means of bounties. When there is a duty of course Government have not so much control. Naturally they cannot fix one duty for a firm which has got Indian control and another duty for another firm.

Sir George.—No, I take it that it must be an Indian Company.

President.—Under a system of bounties it might be possible to provide that unless the Government were satisfied that there was sufficient Indian capital and sufficient Indian control, you would get no bounty.

Mr. Benthall.—Our policy has been to associate Indians with us during the last few years including jute mills.

President.—Have your experts examined the works costs of the Tata Iron and Steel Company recently.

Mr. Benthall.—We have sent the costs to our technical advisers who will consider them closely.

President.—It would have been useful if we could have had their opinion on Tatas' recent costs and their revised opinion on the costs they would themselves hope to attain.

Mr. Benthall.—It starts again with the capital cost.

President.—There is one point that might arise and it is this. In certain kinds of products it may not be possible at this stage for the Board to arrive at any definite estimate of the fair selling price. Take sheets for instance. The Tata Iron and Steel Company have been manufacturing sheets only for a short time and their costs certainly appear at present to be high. In a case like that if the Board found that it was not safe to make an estimate for a long period such as 7 or 10 years and the Board said that these products shall receive protection, but that the fair selling price only shall be revised after two years or so, would that seriously interfere with your business? The idea is to get a fair selling price which may be fixed for a definite period. We will take the price of sheets at Rs. 200. Supposing they require a price of Rs. 400 just now, but they expect to come down to Rs. 300 in two or three years time, in that case the Board may find some little difficulty in arriving at a price which while it enables Tatas to keep on in this interval would enable also the new firm to compete successfully. In such a case if the Board say "all right, we shall fix the selling price for this particular product for two years but the protection shall be continued for 10 years subject to revision after two years."

Sir George.—I don't think it would actually affect the question.

President.—Before you get on to sheets, you may go to bars and things like that. In these things there may not be much difficulty.

Mr. Benthall.—You would probably give an indication and we should probably have to work on that.

President.—We will have to make an attempt. I mean to say we cannot really take the risk of estimating a thing about which we have not got sufficient evidence.

Mr. Benthall.—Quite.

President.—In your other industries on what principle do you fix your depreciation for writing down? Do you follow any particular method or do you simply put down so much?

Mr. Benthall.—Unless the industry is in a very bad condition, in general practice we take the minimum at what the Income-tax people permit us to take.

President.—You take that as the minimum.

Mr. Benthall.—We regard that as an absolute minimum. We don't regard it in many cases as adequate. We always try to exceed that.

President.—You would not consider it prudent to take a smaller figure than the Income-tax Authorities allow.

Mr. Benthall.—Generally speaking we consider that a minimum scale.

President.—Especially as regards machinery we were told that the amount allowed was not sufficient. There is this thing to be said that in India except perhaps in the Jute Industry which is an exceptional case people don't see as much as that even.

Mr. Benthall.—In the coal industry we take a rate of 7½ per cent.

President.—That is for machinery.

Mr. Benthall.—Yes, that is 13 years to write-off the plant.

President.—There is one point that we put to the Tata Iron and Steel Company. If you allowed a rate of depreciation which you took into account for obsolescence and so on and if the State insisted upon that amount of depreciation being laid aside, would it be a hardship on the Company?

Sir George.—I think a great deal depends on the nature of the machinery. There is some machinery which is repaired fully from year to year and does not actually depreciate in value at such a rate. It may become old and out of date and have to be scrapped on that account, but it is not necessarily worn out.

President.—The point rather arises in this way. When there is a bad year there is a temptation on the part of the shareholders to waive the depreciation fund and get a dividend. When an industry is supported by the State, the latter is entitled to know that full depreciation has been allowed into the depreciation account, or that money has been spent on renewals, repairs and so on.

Mr. Benthall.—We should be ready to set aside for that purpose.

President.—Supposing they don't. For instance take the case of the Cotton Textile mills, many of them have not done it.

Mr. Benthall.—So far as we are concerned, there would be no question at all.

President.—You would not mind if there was such a provision put in.

Mr. Benthall.—Not the least.

Dr. Matthai.—Do you think that there would be any difficulty in administering a provision like that?

Mr. Benthall.—No. What we should do is this. We should set aside in good years larger sums and if we had done that, we should probably cut it in bad years.

President.—When you have done that, there should be no obligation in another year. It is the intention that depreciation should be set aside and should be spent on the plant.

Sir George.—Yes, but if the Board make it obligatory, I think they would have to take a lower minimum than the ordinary rate permissible under the Income-tax rule.

President.—The idea in that case was that we allowed 6¼ per cent. We took the life of the plant as 16 years. After that at every stage it is supposed to be kept up to date. You don't think that it would be a particular hardship on the Steel Industry if such a provision was insisted on.

Sir George.—No.

President.—It is simply an idea that we are considering. It is obvious that unless the industry took precautions to lay aside sufficient amount for depreciation, it might never be able to do without protection. After a time it might find the plant worn out and put the country in the same difficult position.

Mr. Benthall.—There would have to be a periodic system of valuation. If you have got a building and keep on repairing when necessary you might keep it in the same condition 50 years hence as it is now.

Mr. Mather.—I take it that in any revival of your scheme for producing steel in India, you will have to consider carefully not merely the kind of steel to be made, but the total market available.

Mr. Benthall.—Yes.

Mr. Mather.—On page 175 of the printed evidence (Volume III) you gave us your estimate at that time of the demand for steel in India. You expected that the demand between 1922 and 1925 would be 1,500,000 tons per annum and then on top of that you expected the importation of iron and steel in the form of machinery of various kinds to be 1,000,000 tons making a total of 2,500,000 tons. That I pointed out in the oral examination at that time as very excessive.

Mr. Benthall.—I remember that. It was so.

President.—The actual figures which we have now got and which were not available then show that the estimate was excessive to a considerable extent. So far as I can see the average consumption of rolled steel in India in the last two years has been about 1,100,000 tons.

Sir George.—As against what?

President.—As against your estimate of 1,500,000 tons, so that the demand in India for iron and steel has not increased as rapidly as you expected three years ago.

Mr. Benthall.—No, but slackness in business and trade generally has been severe.

President.—Then in addition to that you will see from the statements that have been published in this enquiry that the Tata Iron and Steel Company expects to make within a few years a good deal more steel than it expected three years ago, so that the available market over and above what may be supplied by the Tata Iron and Steel Company is very much less than what you had in mind.

Mr. Benthall.—Still it is large enough. In 1922-23 the import was 746,000 tons and in 1924-25 869,000 tons.

President.—The actual figures of consumption are higher than that.

Mr. Benthall.—These are imports.

President.—I have been talking of the total consumption in India.

Mr. Benthall.—So that there is a large margin. We would start slowly, and we hope to get our sales out of imports.

President.—I only wanted you to realise that the available market for additional steel works is not as great as it appeared to you probably a few years ago.

Mr. Benthall.—That is so, but the market is bound to expand.

President.—Nobody can say at what rate the market will expand.

Mr. Benthall.—Quite so.

3. MESSRS. KIRLOSKAR BROTHERS, LIMITED.

(1) *Representation, dated the 12th May 1926.*

Please find enclosed herewith a copy of our representation.

Representation of Messrs. Kirloskar Brothers, Limited, about the maintenance of duty on steel.

The position of our concern which requires a great quantity of mild steel bars for its use has been considerably affected since the levy of duty on steel in March 1924.

In order to bring to the notice of the members of the Board the position of our concern, it is necessary that the members of the Board are given to understand the additions we made to our manufacturing line since 1924.

At the time when the Board was making inquiries in the year 1923, the Board of Directors of our Company had deputed the Works Superintendent to Europe to study the line of manufacturing bolts and nuts and purchase a complete plant of manufacturing bolts and nuts which are sold in thousands of tons all over India. Accordingly we purchased a complete plant of bolts and nuts having a capacity to produce one ton of nuts and bolts per day and costing about Rs. 1,57,568-11-3 in all and began manufacturing nuts and bolts since the beginning of the year 1925.

The position of the steel market at the time of levy of duty was that mild steel bars could be had at Rs. 7 per cwt. and the nuts and bolts could be had at Rs. 21 or Rs. 22 per cwt. or in other words, the proportion of the prices of mild steel to that of nuts and bolts was in a ratio of 1 to 3 approximately.

But since we began to manufacture nuts and bolts, there has been a considerable change in prices of nuts and bolts and those of mild steel bars. While the prices of mild steel bars have practically remained the same, the prices of nuts and bolts have gone down very considerably with the result that the proportion of mild steel to nuts and bolts is now 1 to 1½. This is mainly due to the depreciated currencies of the continental countries and the rise in exchange as well as the rise in duty on steel without any rise in duty on nuts and bolts. The above factors are placing the foreign countries at an advantage and a sort of protection is granted to the foreign manufacturers. Thus if mild steel bars can be had at Rs. 7 per cwt. the nuts and bolts can be had at Rs. 10-8 per cwt. in Bombay. Notwithstanding this exceptional position in the bolts market, our condition has been further aggravated by the adverse location of our plant, because, we are required to pay a railway freight of nearly Re. 1 per cwt. on the mild steel bars brought into our factory and one more rupee per cwt. on the manufactured nuts and bolts which we are required to take back to Bombay again for selling, it being the only large centre of distribution. This alone brings the cost of our raw material approximately to the cost of the bolts and nuts in Bombay let alone the additional manufacturing costs and other expenses. This means that since the manufacturing of nuts and bolts was undertaken by us we are put to a loss of Rs. 300 to Rs. 400 per week with a consequence that we are practically required to close the department.

At the time when the Board was contemplating levy of duty on steel, we represented then that all industries which use mild steel as their raw materials should be given compensating advantages, but the Board at the time summarily disposed of our proposal and we are thus put to very heavy losses. Our main contention then was that while duty is levied on raw materials, the finished products are allowed to enter duty free in the country which is a very great handicap to the indigenous industries.

Under the circumstance, it should not be concluded from the above that we are in any way against granting any protection to the Tatas but on the contrary, we maintain that all industries which employ a large number of workmen in their factories and which are adversely affected by the foreign competitors must, as a matter of fact, be protected and it is, we believe, the sacred duty of every national Government to see that the industries,—which it is, in the first place, very difficult to establish in India—if adversely affected should be protected.

As our production is very small, it would not be fair on our part to request the Board to levy heavy duty on imported bolts, but as we wish to keep our plant in working order, we have to request the Board to give us the following facilities:—

(1) that a reduction in railway freight on raw material and finished product to the extent of 75 per cent. be given;

(2) that the Government and State Railways should place their orders with us to the extent of our capacity and this stuff should be purchased leaving a margin of 15 per cent. clear profit to the Company;

(3) a rebate of Rs. 20 per ton in customs duty should be given on the material purchased by us for the manufacture of nuts and bolts.

We may here bring to the notice of the Board that the quality of our products is approved by the Railway Authorities and the Assistant Controller of Stores Purchase has also inspected our factory and we, therefore, think that the railways will find no difficulty in purchasing our products.

We hope, therefore, that in view of our above explanation, the Board will be pleased to recommend to the Government to grant us the necessary relief asked for by us.

If any further information is required regarding our concern, we shall be pleased to furnish it to the Board and if any oral evidence is required, the same shall also be given by a representative of ours.

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(2) Supplementary representation from Messrs. Kirloskar Brothers, Limited, dated the 13th May 1926.

In continuation of our letters of yesterday's date and of to-day we are herewith enclosing duplicate copies of our supplementary representation about the maintenance of duty on steel which kindly acknowledge.

Supplementary representation of Messrs. Kirloskar Brothers, Limited, about the maintenance of duty on steel.

In continuation of the representation made by us we have to add one more point to the unfair competition which we are required to meet from the foreign manufacturers.

The steamer freight from Antwerp to Bombay for one ton of bolts and nuts is 14*s*. only which at the present rate of exchange comes to Rs. 9-8 and for the same quantity to carry from Kirloskarvadi to Bombay, we are required to pay Rs. 18 per ton. This itself is a very great drawback and we think that if the industries in India are to be established and fostered, the railways must give them adequate facilities.

We had made similar complaints against the freights charged by railways in our representation to the Board last time but no adequate facilities are given to us and in view, therefore, of our present hard times, the Board will be pleased to grant us the facilities asked for by us.

4. MESSRS. RICHARSON AND CRUDDAS.

Representation, dated the 3rd May 1926.

We are in receipt of your Press Communiqué, dated the 16th April, and note that the Tariff Board has been instructed to examine the question as to the extent to which the Protection of the Steel Industry of India should be continued and as to the Duties and Bounties which are necessary for the purpose of conferring such protection.

Following the order given in the Communiqué under reply we beg to put forward our views in regard to the articles in which we are interested, as follows:—

(1) *The grounds on which we consider the continuance of protection necessary in respect of.*

Rolled Steel.—We are inserted as buyers, sellers and fabricators of Rolled Steel *not* as makers and as you state that the general question of the fitness of the steel-making industry to receive protection cannot be re-opened, it would be of little use our expressing our views under this heading.

Fabricated Steel.—It is obvious that having decided to give protection to the Indian Steel Industry, Government must protect this industry against the importation of Fabricated as well as Raw Steel, otherwise the protection can be evaded by the importation of fully or partly fabricated steel in place of the Raw material for fabrication in this country. If, therefore, it is decided to continue the protection of the Steel Industry as a whole, it is essential to continue the protection against imported fabricated steel.

(2) *Whether we consider that the Measure of Protection now given should be increased or diminished.*

Rolled Steel.—This is a question for the Tariff Board to decide after examining the books, etc., of the Tata Iron and Steel Company, but we cannot believe that an increased protection is necessary and trust that in view of (*a*) the very substantial assistance already given, (*b*) the greater experience gained by the Indian Steel makers, (*c*) the reduction in overhead expenses which must have occurred through the training of Indian staffs to replace their high salaried instructors, and (*d*) the very considerable increase in production, it may be found possible to diminish the protection considerably. Some reduction is all the more necessary in view of the continued trade depression in India.

Fabricated Steel.—In 1924 a duty of Rs. 30 per ton was placed upon imported Raw Steel—Beams, Angles, etc.—used for structural purposes and at the same time an "*ad valorem*" duty of 25 per cent. was placed upon imported Fabricated Steel.

Since these duties were imposed there has been a considerable fall in the price of imported steel, so that Rs. 30 per ton on the Raw Material represents a greater percentage of the imported value than it did two years ago—on the other hand the 25 per cent. duty on Fabricated Steel now affords less and less protection as prices drop.

We, therefore, maintain, as we did in 1925, that a revision of the Import Duty on Fabricated Steel is very necessary and that the ratio between the duty on Raw and Fabricated Steels must be maintained, in fairness both to the Steel making and to the Engineering Industries. This was acknowledged and recommended by the Tariff Board last year, but the Government of India did not see its way to increasing the "*ad valorem*" duty on Fabricated Steel.

We trust that this point will be pressed again and that if the Import Duty upon Raw Steel is to remain unchanged then the "*ad valorem*" duty on imported Fabricated Steel should be increased to 33⅓ per cent. as advocated by us last year.

If, on the other hand, it is found possible to reduce the duty on Imported Raw Steel, then the " *ad valorem* " duty upon imported Fabricated Steel must be adjusted so as to maintain the initial ratio agreed upon in 1924.

(3) *Whether any protection, which may be found necessary should be given by means of Protective Duties or Bounties.*

We are strongly in favour of the Bounty System as opposed to Protective Duties in that it does not increase the cost to the consumer, and lower costs would tend to increase the use of steel and so assist trade generally. The Bounty System also insures a stricter supervision on the part of Government who would then be directly interested in reducing the Bounties at the earliest moment.

Under the present system—a combination of Protective Import Duty and a system of Bounties—the extra revenue accruing to Government from the increased duties on Imported Steel exceeds the amounts paid out by Government in Bounties and if trade improves this excess is likely to increase. We would, therefore, advocate a reduction in Import duties on Steel of all kinds, and, if necessary, an increase in Bounties.

We have put forward our views on general lines on the questions as they affect the articles in which we are interested. We would draw your attention to our letter of the 9th July last in which our views were stated very fully.

We shall be pleased to receive your questionnaire when prepared. We shall also be glad to give oral evidence before the Tariff Board, should they visit Bombay for that purpose.

सत्यमेव जयते

5. MESSRS. GEO. SERVICE AND COMPANY.

Representation, dated the 12th May 1926.

We thank you for forwarding us a copy of Press Communiqué, dated Calcutta, April 16th, drawing our attention to the fact that the Steel Industry (Protection) Act, 1924, provides that before the 31st March 1927 an enquiry is to be conducted as to the extent if any, to which it is necessary to continue the protection of the steel industry in this country.

1. As our interest in the Iron and Steel Industry is essentially a Merchant one, there is nothing we can put forward at this stage which has any bearing on the first part of your enquiry.

We should, however, like to express ourselves as being in favour of the present system of protection afforded by a combination of protective tariffs and bounties.

If the revenue accruing to Government under the present schedule of import duties is such that a surplus remains after payment of all bounties sanctioned we would suggest such surplus be applied to affording some reduction in the specific duty of Rs. 30 per ton on item No. 150 in the Statutory Schedule of the Import Tariff.

2. In our letter addressed to the Board, dated July 10th last, we referred to the general classification under this Statutory Schedule No. 150 of the Import Tariff. In this item "Angle and Tee, all other sorts, and Beam, Channel Zed, Troughplate, Piling and other structural sections" "Not fabricated" are all taxed at a specific duty of Rs. 30 per ton. We should suggest this very wide classification requires some modification to exclude special plain steel sections imported specially for use by the Engineering Industries in this country. In the preparation of your questionnaire we hope this point will not be overlooked.

We shall be glad if you will furnish us with a copy of this questionnaire in due course. If any further information is desired will you kindly communicate with us; in our letter of the 8th instant we have supplied a schedule of c.i.f. prices for Continental steel from May 1925 up to April 1926.

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6. MR. G. B. TRIVEDI.

A.—WRITTEN.

(1) *Letter, dated the 21st July 1926.*

In response to your Press Communiqué, dated 14th instant I beg to submit my views on the application of Tata Iron and Steel Company for continuance of protection to the Steel Industry as follows:—

(1) In your Press Communiqué issued by you on the 16th April 1926, you state that the general question of fitness of protection will not be re-opened. This is hardly fair to the consumers of cheap Continental steel bars who are already taxed 50 per cent. and if the demand made by the Company in paragraph 33 for additional duties is accepted, this burden is likely to be 100 per cent. The fact is that at the time of the first inquiry, both the Company and the Tariff Board wrongly thought that the protective duties proposed would enable the Company to compete against British steel, while within few months it was found that the consumer of British steel began to use Continental steel and that the protection required was against Continental steel. Also the Board's calculation of the burden to the country went wrong and the protective duties amount to Rs. 215 and Rs. 281 lakhs in the first two years. Thus the country, or more correctly speaking the steel consumers pay 15 per cent. annually to maintain an industry of the capital value of 15 crores so that within six years more the consumers will pay as much as the capital of the Company. In view of this, it would have been fair if the general question of protection had been re-opened and the question of the burden and its distribution on several kinds of consumers had been discussed and settled.

(2) The Company is still labouring under a mistake that by ultimately reducing the works cost of bars to Rs. 85 and charging Rs. 40 as a margin it will be able to do without protection within 10 years. As I have pointed out previously the pre-war price of Continental bars was £6 as an average, this is not likely to go up at least not to £8 or 9 which will cost the Importers Rs. 125 per ton. Thus until the Company can reduce the works cost to Rs. 60 for bars, it cannot compete Continental bars and the protection will have to last perhaps for 50 years at least as regards Continental steel. The Board therefore should carefully examine the Company's statement and should give its considered opinion whether the protection will be over in 10 years or will last longer. In the last contingency, the Board should pronounce that the first condition laid down by the Fiscal Commission that the Industry must be one which will eventually be able to face world Competition without protection has failed. The other conditions of "being essential for nation defence" and having cheap raw materials no doubt hold good. The burden therefore should be shifted from the Steel Consumers to the General Tax-payer and the protection should therefore be given by means of bounties rather than duties which are unnecessarily heavy and bring to Government big surplus every year. The amount of bounties should be raised by a National tax either by raising percentage of import tariff all round or by some other taxation. In short the Steel Consumers should not alone pay for protecting a National Industry.

(3) The Board in the first report has calculated how the burden would fall on different classes of consumers (1) Government, (2) Public bodies, (3) General consumers. In practice, however, the burden has fallen heavily on the general consumers. In fact the Company-managed Railways have escaped the burden and are freely buying foreign rails, while the ordinary consumer is denied that privilege. The Company is right in demanding Antidumping Legislation and prohibited duties on foreign rails. If the Company can secure customers for its whole output of these articles the burden on the other consumers will be comparatively lightened.

(4) The Company has succeeded in reducing its cost of production and its estimate of further reduction within next seven years seems to be correct. Where its competition is with British steel it will be able to do away

with protection in 10 years. But where competition is with Continental steel the period of protection is bound to be longer. The general consumer buys Continental steel bars, joists, angles, plates and black sheets. In asking protection against these articles the Company asks heavy additional duties in paragraph 33. Looking to the Geographical protection of Rs. 20 per ton on an average due to railway freight advantage these additional duties are unnecessary. The import price of Continental bars, angles, joists is at present roughly Rs. 80 and of sheets Rs. 105 per ton without duty and to levy a duty of 75 and 55 as demanded is to increase the burden of ordinary Steel Consumers by 100 per cent. and 50 per cent. while rich and powerful Railway Companies go scot free. The Board therefore should not recommend any increase of duties at all and if further protection is necessary in these articles it should be given by bounties.

(5) The Board has laid down a principle that articles which are not manufactured by the Company or manufactured only in small quantities should not be taxed. According to this principle, the following articles should be recommended for 10 per cent. duties as before protection:—

(1) Rods, rounds and squares below ½″.
(2) Steel circles.
(3) Octagon steel bars.
(4) Half round iron bars.

(6) Defective and waste materials such as cuttings of bars, rods, plates and sheets are taxed as heavily as new materials specially the first two. Only 10 per cent. revenue duties should be levied on them.

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(2) *Letter, dated the 24th July 1926, from Mr. G. B. Trivedi, B.A., to the Secretary, Tariff Board.*

In support of my assertion in my letter of the 21st instant, I beg to hand you enclosed (1) a letter from George Service and Co., Bombay, of date who held that Continental price will be below £6, (2) a letter from Messrs. John Batt and Company, dated 30th June 1926 giving prices of steel articles since 1881 to June 1926 which will show that Continental bars never went over £7 per ton c.i.f. Indian Ports.

Kindly return me the originals after verifying and making your own copies.

सत्यमेव जयते

Enclosure 1.

Copy of letter from Messrs. George Service and Company, dated the 24th July 1926, to Mr. G. B. Trivedi.

I must thank you for sending me a copy of your statement to the Tariff Board and as desired return it herewith.

I think your points are very good but we must all insist on a re-opening of the question of protection or rather the way in which the money for this protection is to be found. There can be no question about it that Tatas can never compete against cheap Continental steel as at present constituted and even if a most drastic capital reorganisation was sanctioned it would be very doubtful.

There is little chance of getting the body of shareholders to agree to a definite loss of capital and we have got to consider protection to the Company in its present form.

Your point about the pre-war and present cost of Continental steel will be a big factor in any discussion on your letter. It can be laid down not only will the cost of steel be down to pre-war level but probably lower. During the war the means of producing steel was not only increased beyond the world's present need but the methods of production were improved and costs lowered. We have got to consider Continental steel at a price of about £5-10-0 to £6-0-0 c.i.f. Bombay and no figure above this need be considered. The Tariff Board will not appreciate this but it is your best point and cannot be over emphasized.

I hope you will be successful in your visit to Calcutta and shall be interested to see you on your return.

Enclosure No. 2.

JOHN BATT & CO. (LONDON), LIMITED.

39, Old Broad Street, E. C. 2.

Established 1802. Incorporated 1900.

Steel and Iron.

The coal strike has had a stiffening effect on British prices especially galvanised sheets and tinplates.

The decline in Continental prices has continued under the influence of exchange difficulties and absence of demand.

We invite attention to the comparisons below. The figures down to 1910 are the approximate averages. Those from 1913 are definite quotations.

It is significant that steel is now obtainable below the average for 1913. In comparing galvanised sheets it should be borne in mind that spelter has risen by £20 and is still £10 above 1913.

	Bars.	Joists.	Plates.		Galvanised sheets.
			$\frac{3}{16}''$	$\frac{1}{8}''$	
					£ s. d.
1881—1890 . .	140	130 0	165	175	...
1891—1900 . .	135	120 0	145	155	10 15 0
1901—1910 . .	130	135 0	135	140	11 5 0
1913 March . .	130	127 6	143	146	12 10 0
„ June . .	125	126 0	129	131	11 15 0
„ September .	108	124 0	121	124	11 5 0
„ December . .	106	115 0	116	119	12 0 0
1914 March . .	102	114 0	111	115	11 15 0
„ June . .	96	111 0	109	111	11 10 0
1925 March . .	134	129 0	160	170	17 10 0
„ June . .	135	128 0	155	167	17 5 0
„ September .	125	120 0	142	150	17 10 0
„ December . .	121	114 0	125	135	17 15 0
1926 March . .	120	114 0	125	135	16 17 6
„ June . .	113	111 0	120	127	17 7 6

Quotations c.i.f Indian Ports.

For Hongkong, Shanghai or Japan *add* 17/6.

30th June 1926.

सत्यमेव जयते

(3) *Price list from John Batt and Co. (London), Limited, dated the 31st March 1926.*

The production in 1925 shows considerable further advance due mainly to a substantial increase in the United States of America.

The world's demand lags behind production and until it has caught it up there seems little or no prospect of any substantially higher level of prices. The advancing tendency during December was not maintained and prices declined again following upon settlement of the Belgian strike in February, and the subsequent break in the rate of exchange.

American unfilled orders remain unchanged at 4½ million tons.

We quote c.i.f. Indian Ports:

——	Continental.	British.	American.
	£ s. d.	£ s. d.	£ s. d.
Iron Bars	6 5 0	11 18 6	12 0 0
Mild Steel Bars	6 0 0	8 15 0	10 5 0
„ „ Joists	5 14 0	7 1 0	10 5 0
„ „ Plates (thick) ⅜ up	6 5 0	8 2 6	9 10 0
„ „ „ (thin) ½	6 15 0	10 2 6	11 10 0
„ „ Hoops	8 2 6	10 2 6	11 10 0
„ „ „ cold rolled	12 0 0	20 0 0	22 10 0
„ „ Sheets 24 C	10 12 6	12 0 0	13 0 0
Galvanised Corrugated Sheets 24 C	17 2 6	16 17 6	18 15 0
Galvanised Wire	10 2 6	15 2 6	12 5 0
Bright Wire	8 12 6	12 2 6	10 15 0
„ „ Nails	10 0 0	15 12 6	12 7 6
Tinplates I. C. W. 70 lbs.	20 6 0	18 9 0	21 6 0
Gas Tubes—black—list . . loss	76½%	69½%	69%
„ „ galvanised . . „	66½%	60½%	61%

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For Hongkong, Shanghai or Japan: *add* 20/- to Continental and 15/- to British, *deduct* 5/- from American.

G. B. TRIVEDI, ESQ.

B.—ORAL.

Evidence of Mr. G. B. TRIVEDI, recorded at Calcutta on Wednesday, the 18th August 1926.

THE STEEL MARKET IN BOMBAY.

Prices of British and Continental Material.

President.—The Board is very much obliged to you for the trouble you have taken to come to Calcutta in order to assist it. Are you giving evidence on your own behalf or are you speaking also on behalf of the Iron Merchants' Association of Bombay?

Mr. Trivedi.—I didn't seek any representation from them, but they have agreed with my views.

President.—You have consulted them before?

Mr. Trivedi.—Yes, and if the Board has no objection I will also say that I represent them.

President.—Do you hold any office in the Bombay Iron Merchants' Association?

Mr. Trivedi.—Not now. Formerly I was their Secretary.

Dr. Matthai.—What proportion of the iron business in Bombay is represented by the Association?

Mr. Trivedi.—Nearly all the bazar requirements.

Dr. Matthai.—Practically all the people interested in the iron trade would be represented by the Association.

Mr. Trivedi.—Yes.

President.—So far as you are personally concerned, I understand that your business is chiefly in Continental steel.

Mr. Trivedi.—I deal in all steel.

President.—But mainly in Continental steel?

Mr. Trivedi.—Yes, because the main business of the bazar is in Continental steel.

President.—As regards the Bombay Iron Merchants' Association, they deal equally in British and Continental steel.

Mr. Trivedi.—British steel is very little, except galvanized corrugated sheets.

President.—They are chiefly of British manufacture.

Mr. Trivedi.—Yes. Even the British hoops have now ceased to be of any importance. Two years ago, the import of these hoops was very large. Now the Continental hoops are taking their place.

President.—I wish to deal with your representation, dated the 21st July 1926, where you raise the general issue. One of your contentions is that the general question of the fitness of the industry should be re-opened.

Mr. Trivedi.—Yes.

President.—Your ground for that contention is that it will be necessary to determine the burden of protection on the consumer chiefly.

Mr. Trivedi.—Yes.

President.—Whether that question is open or not, we may have to go into the question of burden of protection in any case.

Mr. Trivedi.—There is another consideration. In the first enquiry you said that "we have given some consideration only to Continental steel;"

whereas in the second enquiry you admitted "much consideration shall have to be given to the Continental steel;" so, that changes the whole position. Tata's idea was that protection against British steel would suffice them.

President.—That was the position then.

Mr. Trivedi.—At that time bazar dealers were not afraid.

President.—I have always understood that your attitude towards this question was that if a case was made out, protection should be given to the Steel Industry.

Mr. Trivedi.—Yes.

President.—That is your position even now I take it.

Mr. Trivedi.—Even now I admit that the industry should be protected.

President.—Having come to that decision, whether the competition really comes from Great Britain or from the Continent is a secondary question. If the industry is unable to compete against Continental steel, then is it not necessary to protect the industry against Continental steel?

Mr. Trivedi.—Yes, on national grounds.

President.—The position has changed in some respects as for instance in the case of angles and bars.

Mr. Trivedi.—Yes, and black sheets also.

President.—But still the main issue is not at all affected.

Mr. Trivedi.—As far as consumers are concerned, it has been affected in this way. The Board took the view that additional duties would give protection. We have from the very beginning said that they would not give protection. If you had taken into consideration the competition of Continental steel, you would have recommended bounties. That is my view.

President.—That is your view. Whether the Board would have recommended bounties is more than we can tell.

Mr. Trivedi.—I admit that.

President.—The main thing is that if the industry—assuming that it gets protection—can do without competing against Continental steel, then there is no occasion whatsoever for burdening the consumer of Continental steel, but supposing the industry cannot do without competing against Continental steel, then there is no help for it.

Mr. Trivedi.—Would the Board like to hear my suggestion how Tata's would not be compelled to come and compete against Continental steel in the bazar?

President.—We should be very glad to hear your views on that point because that may be a very simple solution of the problem.

Mr. Trivedi.—If it is possible, Tata's can confine themselves to the manufacture of corrugated sheets, rails, heavy structurals and the requirements of the engineering firms. All these would give them so much work that they need not care for Continental competition.

President.—That is perfectly true. But we are not concerned with the Tata Iron and Steel Company only. We are now concerned with the industry as a whole. You cannot allow the Tata Iron and Steel Company to go on for ever without anybody else coming into the field. You will admit that.

Mr. Trivedi.—Yes.

President.—If another concern is started supposing the Tata Iron and Steel Company dropped out it will have to do the same.

Mr. Trivedi.—My own idea is that if any other company wants to come bearing in mind the heavy Continental competition, it will think twice before it starts. Tata's had already started. So, it is the duty of the country to protect them. Another company coming into the field will think twice before starting because of the Continental competition.

President.—Let us understand what this means. First of all as regards products, where do you say the Continental competition comes in chiefly?

Mr. Trivedi.—Bars and black sheets—incidentally structural materials also.

President.—But there is not so much difference in structural materials speaking as a whole.

Mr. Trivedi.—Do you mean the difference in quality?

President.—No, in price as there is in bars for instance.

Mr. Trivedi.—There is the same difference.

President.—I thought that the difference in the case of bars was higher.

Mr. Trivedi.—I have got figures here. In bars it is £2-15-0 at present, whereas in joists it is £1-15-0.

President.—That is what I say. So that really it is the bars with which you are concerned more than with joists and structurals.

Mr. Trivedi.—Yes.

President.—Your contention is that so far as bars are concerned, Indian steel will not be able to compete against Continental steel.

Mr. Trivedi.—Yes.

President.—In the case of joists, it may be able to compete hereafter.

Mr. Trivedi.—As far as I understand, Tata's want better price for joists than for bars. In bars they are even willing to compete but in joists they are not, and their production is not so great as the country would require.

Mr. Mather.—That probably accounts for the fact that they are not willing to cut their prices for joists.

Mr. Trivedi.—Their output is so small that they can easily find customers in the engineering firms.

Mr. Mathias.—Am I correct in understanding that your view is that the Indian steel industry will never be able to compete against Continental steel in the matter of bars?

Mr. Trivedi.—They say that in ten years their works cost for bars will be Rs. 85 and their overhead will be Rs. 40. If those figures are correct, then after ten years the Belgian price will be £9 to compete successfully against Indian steel bars.

President.—This assumes that your forecast as to Continental price must also be accepted as correct.

Mr. Trivedi.—I base my forecast on past experience. From 1880 down to the outbreak of war, the Continental price was always wavering between £6 and £7—never more than £7.

President.—Recently it has been about £5.

Mr. Trivedi.—It is £5-15-0. Our own buying price is £5-11-0.

President.—It is about £5-15-0.

Mr. Trivedi.—Yes. For that the Board itself have given special reasons.

President.—It is more or less clear that the price of steel is below or about pre-war level, is not that so?

Mr. Trivedi.—In sterling it was at the outbreak of war £5-5-0. I was in a German firm as a salesman.

Mr. Mather.—For the quarter ending June 1914 the German price for bars was £4-16-0.

Mr. Trivedi.—Was it f.o.b.?

Mr. Mather.—Yes. It was very much higher during 1913.

Mr. Trivedi.—Just at the outbreak of war, I sold at £5.

President.—You cannot take that price as the typical pre-war price. This was the price almost on the eve of the war. It is quite possible that Germany might have wished to sell as much steel as possible and get money. If you took the price of say March or December. . . . . .

Mr. Trivedi.—I am prepared to say that the average price was £6.

President.—There is no commodity, as far as we know, of any importance where its price has already reached the pre-war level. The wages, for instance, have gone up considerably. You would admit that wages form a very large percentage of the cost of producing steel.

Mr. Trivedi.—The Board has already said in the first Report that the output on account of new machinery put in steel industry everywhere and specially on the Continent was very great and that the buying capacity of the world had diminished. All these factors come in.

President.—Supposing these factors cannot be accepted as permanent until we know more about them, what is your proposal? Supposing we come to the conclusion that steel cannot be sold at such low prices for any length of time either by the Continent or Great Britain and that in the meanwhile it is essential to protect the Indian industry against any fall in prices, what is your proposal?

Mr. Trivedi.—My proposal is to protect them by bounties.

President.—What you propose is this that the countries with depreciated currencies should be enabled to carry on business here in India at the expense of the Indian tax-payer. That is what it comes to.

Mr. Trivedi.—I differ from that.

President.—Is not that the result? By paying bounties you propose to make it possible for the Continental manufacturer who has got the depreciated exchange in his favour to come into the market and injure our industry.

Mr. Trivedi.—I don't accept your proposition that it is on account of the depreciated exchange that they are selling at such a low price?

President.—That is one of the factors, is it not?

Mr. Trivedi.—I can point out, if the Board will like to hear me, that when you took evidence in September 1924 the price was £6-10-0 and the franc was 100 or thereabouts. Now the franc is about 200 and still the price has only depreciated to the extent of 15 shillings.

President.—We don't say that it varies in exact proportion to the depreciation in the exchange. The variation in prices which has taken place is to a considerable extent explained by the depreciating exchanges.

Mr. Trivedi.—My personal opinion is that there are other factors. This only disturbs temporarily.

President.—We are talking of a temporary condition.

Mr. Trivedi.—Temporary in this way that if to-day the exchange is fluctuating I may rush in and get the benefit of yesterday's prices and another man may not get that.

President.—What is the industry to do just now?

Mr. Trivedi.—The industry does not suffer in competition on account of the depreciated exchange of the Continent. Take the case of Germany. It has no depreciated exchange.

President.—Germany has got to compete against Belgium and France.

Mr. Trivedi.—That is exactly what I say.

President.—Is it not a fact that this reduction of prices originated in those countries which have depreciated currencies. Is that a fact or not?

Mr. Trivedi.—That is a coincidence.

Dr. Matthai.—Your point is that the other factors are much more important.

Mr. Trivedi.—Yes.

Dr. Matthai.—During the past six months, has there been a corresponding or something like a corresponding change in prices?

Mr. Trivedi.—Not much. There is a moral factor in the fall of a country's currency. Everything is disorganised. A manufacturer thinks that he will be ruined to-morrow and that therefore he must sell. That is another thing. That is only temporary. Besides, they are selling in sterling and not in francs. If there is a steadiness for six months or so, they might sell a few articles in francs but most of the articles they always sell in sterling.

President.—What difference does that make? When he gets the money, he converts it into his own currency.

Mr. Trivedi.—He may have to pay more for his raw material.

President.—It cannot be carried to any very great length.

Mr. Trivedi.—The Board said that the Continental depreciation had not had much effect.

President.—What the Board said, as far as I remember, that the depreciated exchanges brought down the prices but that prices did not always come down in proportion to the depreciation.

Mr. Trivedi.—Here are the very words of the Board:—"Something must be attributed to this general depreciation of the Continental exchange, though we don't rate this influence very high except as a temporary factor."

President.—We are discussing that. If it is a temporary factor, then why should the country's money be spent on rectifying its influence?

Mr. Trivedi.—In two years the fall is only 15 shillings.

President.—You must take it from 1924 from the time we reported. We reported in April 1924 when prices were relatively high.

Mr. Trivedi.—It was £6-10-0.

President.—It was much higher than that, I think.

Mr. Trivedi.—The British price was £8.

President.—If you take it in rupees it was Rs. 108.

Mr. Trivedi.—That is not our fault. It is the fault of the Government of India. At that time, the exchange was 1*s.* 5$\frac{5}{32}$.

Dr. Matthai.—That is somewhere about January 1924?

Mr. Trivedi.—No, in 1923. At the beginning of Chapter IV of your First Report you have taken it as £5-10-0 f.o.b.

President.—My recollection is that it was certainly higher than £5-10-0 in 1924.

Mr. Trivedi.—Even at the last enquiry the price was £6-10-0 and the franc was 100.

President.—From our point of view, there should not be any violent fluctuation in prices which disturbs what we consider the fair selling price of Indian steel.

Mr. Trivedi.—I am prepared to give Tatas whatever bounty you consider reasonable. It is better than being taxed so high.

President.—Supposing there was no money for the bounty?

Mr. Trivedi.—Tax us and tax the whole public. It is a national industry, and once you introduce protection you must tax the whole country.

President.—In order to give Continental prices time to stabilize themselves, that is what it comes to?

Mr. Trivedi.—In order that the consumer may get the benefit of Continental imports.

President.—If we come to the conclusion that the benefit that the consumer is likely to get is only temporary and not permanent, then is it necessary for the State to incur so much expenditure? Supposing we come to the conclusion that there are temporary conditions which are likely to disturb the prices. I should consider that it would be throwing away public money.

Mr. Trivedi.—In that case I want the Board to consider the case of areas which are not reached by Tatas. Why should they be unnecessarily taxed? Karachi, Bombay, Madras and Rangoon are areas which will never be served by Tatas and why should they be made to pay higher duties, and be denied the use of cheap Continental steel?

President.—But at present we have not evolved different tariffs for different parts of the country. Is that a practical proposition? What is the alternative you would suggest?

Mr. Trivedi.—You can raise the internal railway freights. As I said, it is a great injustice to Bombay specially. We paid Rs. 64 lakhs in duties in the first year and Rs. 81 lakhs in the second year for protecting a national industry. Why should not the whole nation be taxed, why should the Bombay, Karachi, Madras and Rangoon consumers alone be taxed?

President.—If the Steel industry expanded and it had to seek its market elsewhere, than in the neighbourhood of Calcutta, and if we were to rule out the possibility of the industry entering these markets, the result will be that the industry will not expand. We are looking at it from a broader point of view, not from the point of view of the Tata Iron and Steel Company but from the point of view of the Steel industry as a whole. Supposing that the scheme of protection succeeds and leads to the establishment of other works, will you not admit, that they will have to find markets in all parts of India?

Mr. Trivedi.—In that case I can prove that India will never be able to produce steel cheap enough to compete against Continental steel and the country will be permanently taxed for no real benefit.

President.—If you can prove that proposition, Mr. Trivedi, you will have achieved a great deal!

Mr. Trivedi.—Even if it comes to £7, even then Indian steel cannot compete against Continental steel.

Mr. Mathias.—Because it cannot be manufactured as cheaply as Continental steel?

Mr. Trivedi.—Yes.

Mr. Mathias.—What is your ground for saying that?

Mr. Trivedi.—For 40 years before the war the British steel manufacturers who are more expert than Indian steel manufacturers, have not been able to compete against Continental steel in India. Continental steel drove away British steel; how can Tatas drive away Continental steel unless you make an artificial barrier against it and deny the consumer the use of cheap steel?

Mr. Mathias.—It depends entirely on the relative advantages of the two countries, does it not?

Mr. Trivedi.—My interest lies in buying in the cheapest market. If you prevent me from buying, then you must supply me all the steel I require. There must be strong reasons why you should debar me from buying from other markets.

Mr. Mathias.—I understand your position. If it is proved to the satisfaction of the Board that the Steel industry in India is capable within a reasonable time of producing steel at a price which will be more favourable than the Continental price, you will have no particular objection?

Mr. Trivedi.—No. What I say is that all the figures that Tatas have put before the Board prove that in ten years' time they will not be able to compete. Then there is one more point that I want to put before you. Tatas always ask that they must get the fair British price. That is not right. If they come to the market then they must come and compete against the market price.

Dr. Matthai.—What they want is a fair selling price.

Mr. Trivedi.—If the Board settles a certain price as their fair selling price, then I would prefer payment by a bounty. I am not against protection from that point of view.

Dr. Matthai.—Supposing ultimately we want to have a well developed Steel industry in this country, do you think you will be able to get it unless it meets the bazar demand?

Mr. Trivedi.—Our sacrifices will be unnecessarily heavy, that is why I say if you re-open the question there will be many people coming forward to prove that Indian steel cannot compete against Continental steel.

Dr. Matthai.—Your position really comes to this that you will leave out of the protective scheme altogether things like bars. But if we said bars should be included, in that case you would rather have it protected by means of bounties?

Mr. Trivedi.—That is right.

Dr. Matthai.—And you would have the bounties financed by general taxation?

Mr. Trivedi.—That is my idea.

Mr. Mathias.—You do not mean that whatever protection is necessary should be given entirely by bounties?

Mr. Trivedi.—I agree to that.

Mr. Mathias.—I understood you to say that your contention is mainly in relation to bars?

Mr. Trivedi.—That is the chief article.

Mr. Mathias.—What I mean to say is, you would not object to duties being put on those classes of steel in regard to which British steel competes with Tatas; you do not wish that bounties should be given in respect of those classes, do you?

Mr. Trivedi.—I am concerned more for the common consumer than for big bodies like railways or Government or engineering firms. They are able to bear the burden, the common consumer cannot.

Mr. Mathias.—Your point is that the common consumer should be relieved of the burden of taxation by means of bounties, but as regards others, municipal corporations, railways and so on, you will have objection to duties being put on?

Mr. Mather.—Would you apply that to galvanized sheets as well as to bars?

Mr. Trivedi.—In Bengal there is a demand and it is a cheap article for the common consumer. If that is so it should not be heavily taxed.

Dr. Matthai.—What is the position in Bombay? Who are the classes of people who take galvanized sheets.

Mr. Trivedi.—Generally factories and such people, not common people. Here it seems to be different. It is used extensively by cultivators in East Bengal. Then there is another thing about bars. If Tatas can agree as in the case of sheets that they will not charge any overhead items when they come to compete against Continental steel, Tatas say for 10,000 tons of black sheets they are not going to consider any overhead charges—let them come forward and say "we will not charge overhead items on bars," then they can compete.

President.—I want to point out to you that if we were to exclude bars and structurals and black sheets, it would mean the exclusion of about 240,000 tons of steel, not including imports from Great Britain, and therefore any new industry which starts cannot get this market at all of about 240,000 tons, if Continental steel is allowed to compete successfully against Indian steel. I am asking you to look at it from the country's point of view. If a new works comes in—rails are practically all taken over by Tatas—it will have to depend on corrugated iron sheets and heavy structurals and compete against Great Britain. If it cannot compete for about 240,000 tons of bars and structurals which are now imported from the Continent, will it have a sufficiently large market?

Mr. Trivedi.—The country should not encourage such wild adventures at the cost of the consumer. The Tata Iron and Steel Company's case is a different one because they have already existed here and it is our duty to preserve it, but for another works, in my opinion, there is no field unless it says "we shall adopt Continental methods of manufacture." They can perhaps do it. Our material is cheap, labour is cheap, why should it not compete? But the difficulty seems to be in the management, although I have no personal knowledge about it, but that is the impression of those who are able to judge. I lately met a gentleman from Germany and his opinion was that the cost of the present management was very heavy.

President.—The cost of management is not really going to make such a big difference as people think.

Mr. Trivedi.—Rs. 40 per ton overhead including interest and depreciation, people on the Continent consider it too high. At present I am importing at Rs. 80. If you raise the duty by Rs. 70 more it would come to 100 per cent.

President.—Supposing we took these Continental prices as not being prices that are normal, in such a case..............

Mr. Trivedi.—If you put an additional duty then you will have to revise them from year to year.

President.—Supposing we devised a scheme by which, if the Continental prices went up by, say, Rs. 20, that additional duty is reduced, would not that meet the situation if it is only a temporary cause that we have to provide against?

Mr. Tridevdi.—Our whole contention is that Tatas reach perhaps only one-third area of the whole country, why should two-thirds be unnecessarily taxed to the extent of 100 per cent.?

President.—That applies to the whole policy of protection.

Mr. Trivedi.—Therefore I suggest a bounty.

President.—Even the bounty has to be paid by the tax-payer?

Mr. Trivedi.—I am a unit of the whole population of India and as such I am prepared to pay that.

President.—You do not want the burden to be concentrated on one class of tax-payer, you want it to be distributed throughout the country.

Mr. Trivedi.—That is the opinion of people who are in the trade.

Dr. Matthai.—Supposing you throw all the burden on the railways, the increased charge would affect not merely the steel consumer, but every tax-payer in the country.

Mr. Trivedi.—The Railway Administrations don't care so much for cheap prices as a common consumer does. They pay any price demanded?

Mr. Mathias.—The general taxpayer who does not use steel and who is situated at a fairly long distance from the steel manufacturing area, has an equally good case for objecting to a duty, has he not?

Mr. Trivedi.—Yes. It is the duty of those who are in favour of protection to convince the Assembly that it is a national industry and that therefore it must be protected.

Mr. Mathias.—You are really re-opening the whole question of protection.

Mr. Trivedi.—Bounty or duty is within your reference. That is exactly what I say. In the first enquiry the conditions were so fluctuating.

President.—If we are to accept your argument that Continental prices more or less would remain at their present level...........

Mr. Trivedi.—Not at present level. I am prepared to go up to £7.

President.—Even so the country must go on paying bounties for ever if your contention is that India can never produce steel, as cheaply as the Continent.

Mr. Trivedi.—My submission is that protection has come to be a permanent burden.

President.—Supposing it was going to be a permanent burden, do you mean to say that the country is going to allow it to be imposed?

Dr. Matthai.—As far as bars are concerned, you say that there is no case for protection, but if the Board thinks that there is a case for protection, then you would give it in the shape of bounties.

Mr. Trivedi.—Yes. I will go a step further. The industry is there. The question is how to preserve it. I am not for killing it, but I am for confining it to a reasonable limit so that it may not unnecessarily affect the areas which are not served by the Company. That is what I say. You can just understand the feelings of people in Bombay, Karachi, Madras and Rangoon not getting any advantage from Tatas and still paying taxes from year to year. They have already suffered for 3 years. If you decide now, it will be for 10 years more.

President.—Supposing we come to the conclusion that it is not feasible to recommend any bounties and we also find that these conditions on the Continent are liable to lead to serious variations and therefore serious fluctuations in prices for a temporary period, then in that case what do you propose?

Mr. Trivedi.—Supposing you don't accept my suggestion of bounty from general revenue, even then I would give them a bounty and raise sufficient money by taxing the import of steel.

President.—Supposing for the sake of argument we have ruled out bounties, what system do you suggest?

Mr. Trivedi.—What can I say? Then the other thing is Government have got Rs. 5 crores as surplus.

President.—What surplus? They havn't sent us any cheque to hand over to the industry.

Mr. Trivedi.—The taxpayer has a right to enquire where is that Rs. 5 crores earned by Government from excessive protective duties.

President.—The taxpayer can do as he likes elsewhere.

Mr. Trivedi.—On your recommendation Government levied duties. As your calculations went wrong, Government has got more than Rs. 2 crores every year over your estimated revenue. Government can pay out of that fund. They cannot take it to the general revenues.

President.—The Government's pocket is like a bottomless pit. Once a thing goes into it, it seldom comes out.

Mr. Trivedi.—Is it fair to the consumer of steel that the Board should recommend anything from which Government are making money?

President.—Government are ordinarily the people.

Mr. Trivedi.—They don't do it in an open way. Government are not the people at present.

President.—Supposing we ruled out bounties............

Mr. Trivedi.—If you recommend any additional duty, then I submit it is not necessary to have additional duties. Any more duty will completely ruin the trade throughout the country specially in ports. At present people find great difficulty to pay for the invoices. They don't find easily money to pay the customs duty. They can't make any arrangement for duties as with the bank. It would be ruinous to the trade to have any additional duty.

President.—I don't mean additional duty in that sense.

Mr. Trivedi.—That is what Tatas have asked for.

President.—Supposing these duties remain as they are, have you any objection from the consumer's point of view?

Mr. Trivedi.—My objection is that Government should not make any money out of protection. If they find that there is a surplus, they must apply it to the reduction of the duty or give more bounty to Tatas. I don't mind. I wouldn't have minded if Tatas were given all the Rs. 5 crores. That would have helped them.

Dr. Matthai.—The surplus revenue might help a remission of the provincial contribution.

Mr. Trivedi.—We steel consumers can ask for an allowance out of the surplus custom revenues.

Mr. Mathias.—Dr. Matthai's point is that if you insist on Government disgorging all the money which they have received on account of the steel protection, possibly in consequence they might be so poor that they might not be able to remit the Bombay provincial contribution.

Mr. Trivedi.—That is another question. Government have taken away so much money. The Board should now make a recommendation that there should be a separate fund created for protective duties and nothing from it should be used for general revenue purposes. From that fund protection should be given and additional duties should be levied whenever necessary.

President.—In course of time, the duty will diminish, because the scheme of protection expects the home industry eventually to supply the whole of the country's demand, in which case there will be no money for payment of bounties. The Government to-day may have got this large surplus that you are talking about, because the production in the country is small compared to the demand, but when that production goes up, when it more or less reaches a stage, when there is no further import, there is no money for bounty and the scheme breaks down.

Mr. Trivedi.—So much the better when we have not to pay the bounty to Indian Steel Industry.

President.—The fund will become smaller and smaller as more and more steel is produced in the country.

Mr. Trivedi.—I don't say that Government should not levy a duty for collecting sufficient money to pay Tatas. At present they have got Rs. 5 crores. I mean for a year or two they can pay bounties. There will be additional protective duties collected during the next few years. My own submission is from year to year they must watch and ask the Tariff Board to find out what should be the duties next year. From the experience of the past year, new tariffs shall have to be fixed.

President.—I am glad you have raised this point. I wish to know your views. Supposing it became necessary for the Board to say that the conditions were so uncertain that no scheme to work for several years could be desired without some alterations in the duty, do you suggest that revision should take place periodically, every year, or how?

Mr. Trivedi.—There must be one thing certain that the industry must be told that the country is prepared to protect it for 10 years more. By what means, the Tariff Board and the Government should decide.

President.—I put it to you this way. Supposing we came to the conclusion that owing to the exchanges or some other uncertain factors an additional duty was required only for that purpose, and supposing we also came to the conclusion that steel should be sold in this country at say Rs. 120 a ton all steel that came in under Rs. 120 would have to pay the duty—but supposing some steel temporarily came at a much lower figure and then we recommended that an additional duty should be put and if the price rose, it should be varied .

Mr. Trivedi.—I think it is unfair to the consumer to say: "You shall not buy under Rs. 120".

President.—This must be the basis of any scheme of protection. The industry should get a certain price and the consumer should be prepared to buy at that price the protected article. Unless the consumer buys the steel at a certain price, there can't be any scheme of protection.

Mr. Trivedi.—That is exactly where I differ. I say by the bounty system Tatas can go to the Board or to Government and say "Steel is entering the country at this price and give us a bounty to lower our selling price to that level."

President.—For the time being we have ruled out bounties. Now I am suggesting to you whether a scheme of revising the duties according to the rise or drop in price would be workable. I mean that the additional duty would be of a temporary nature.

Mr. Trivedi.—Your scheme will make discrimination between one country and another. It would be very much annoying to the importers.

President.—Supposing it became necessary for us after consideration to put forward such a scheme.

Mr. Trivedi.—You have the time and leisure to go through the question. The Legislature will not have that much time and experience. You have expert knowledge of these things. This variation in duties would be very troublesome to the trade. In the first place if the trade knows it before one year it is something. Otherwise if we put the duty on or if we removed the duty suddenly, it will be very troublesome to the trade. You recommended reduction of the duty on round rods. Do you know the sudden effect of that? Prices fell down by As. 12 a cwt.

President.—You are an expert in this business of importing steel. You study your prices, don't you, from day to day?

Mr. Trivedi.—Yes.

President.—Then you know how prices have behaved in a particular year and supposing Government took those prices as the basis for altering the duties, you would know what form the alteration would approximately take. Why should there be any disturbance?

Mr. Trivedi.—Disturbance in this way there would be. What is the surplus Government have got, we don't know. Whether Government will put 5 per cent. duty more or take off 5 per cent., we don't know.

President.—They follow a certain rule. They get a record of prices just as we do. Supposing last year the price was Rs. 120. We start with Rs. 120. This year the price on an average is Rs. 110. You will know well in that case what additional duty Government put in the following year. How will that be a hardship if you are in touch with prices? Government do it every year in the case of some commodities.

Mr. Trivedi.—If Government do it for revenue purposes, we have no objection.

President.—For the time being it would be precisely in the position of a revenue duty. Supposing they do it in the same way as in the case of tariff valuation, would not you be sufficiently protected?

Mr. Trivedi.—Your scheme will remove the advantage of cheap price that the consumers get from the Continent.

President.—We must assume that the consumers' case has already been considered and that it has been decided that the consumer shall pay Rs. 120.

Mr. Trivedi.—There are two kinds of steel. Government should say Rs. 120 for British steel and Rs. 90 for Continental steel. You are for fixing only one price. That means that the consumer shall henceforth be debarred from buying Continental cheap steel. All the orders will then go to England.

President.—Supposing that there was a sufficient difference which would enable the Continental steel to compete against British steel.

Mr. Trivedi.—The difference is about £3 now.

President.—Supposing we come to the conclusion that such a large difference was due to temporary causes?

Mr. Trivedi.—Even if you fix the difference at £2, it would be some relief to the consumer.

President.—How do you mean £2?

Mr. Trivedi.—If you say that there would be a difference of Rs. 25 between the price of British steel and that of Continental steel as it enters the country and that Continental steel will be taxed at Rs. 100 and British steel at Rs. 125, then I am not prevented from using the Continental steel, although I am paying a higher duty.

President.—British steel is already more expensive. If you put another Rs. 25, you rule out British steel altogether.

Mr. Trivedi.—For the purpose of bars it is not coming in at all. It is not even 10 per cent.—perhaps 6 or 7 per cent., but as soon as you level up the prices, all the orders will go to England and the consumers will have to buy dear steel.

Dr. Matthai.—You want the duties so arranged that there is a certain difference in the country between the prices of Continental and British steel.

Mr. Trivedi.—At least I should not be prevented from the use of cheap thing. If another man wants British steel, let him have it. Why should the common consumer be prevented from buying cheap steel?

Mr. Mather.—You don't wish to change the source of your purchases?

Mr. Trivedi.—Why should I?

Mr. Mathias.—Do you mean that if there is a difference between the British and the Continental steel, say in bars, of Rs. 39 a ton you would not object to a proposal that there should be a duty of, we will say, Rs. 30 on British steel and Rs. 55 on Continental steel?

Mr. Trivedi.—There must be a difference of Rs. 25 at least in the sale price of the two in the country.

Mr. Mathias.—What do you consider should be the margin of difference between Continental and British steel?

Mr. Trivedi.—£2.

Mr. Mathias.—Do you think that that is a difference which would always remain?

Mr. Trivedi.—Before the war it is £1-10-0. Now it is £3. It might go to £2.

President.—£2 as regards bars or what?

Mr. Trivedi.—Generally plates £2, bars £2-15-0, joists £1-15-0, iron bars £5.

President.—What is the difference in regard to the other items such as plates, joists?

Mr. Trivedi.—If you put £2, it would be all right.

President.—The duty that is now in force has not had the effect of reducing the consumption of steel. The country has not found steel so very expensive in spite of protection.

Mr. Trivedi.—Expensive in this way that the consumer is paying Rs. 40 duty instead of Rs. 10.

President.—The demand has not been affected by the duty having gone up.

Mr. Trivedi.—Not appreciably.

President.—So far as the consumer is concerned, he may buy steel as he has been doing.

Mr. Trivedi.—I won't say as he has been doing.

President.—He does it.

Mr. Trivedi.—He buys it grudgingly.

President.—The imports appear to have been increasing.

Mr. Trivedi.—There may be new factories started.

Dr. Matthai.—Your point is that it would have been much greater but for the duties.

Mr. Trivedi.—Quite so.

Dr. Matthai—Do you think that a periodical variation would unsettle your business?

Mr. Trivedi.—If we knew 6 months beforehand, it would not.

President.—You would know from day to day. You yourself would be in touch with the prices, on which Government would act. Government cannot invent prices.

Mr. Trivedi.—They fix prices for tariff purposes for the whole year.

President.—Supposing your system is adopted............

Mr. Trivedi.—I only request that there should be a difference between the British and Continental steel, so that we might not be denied the opportunity of buying Continental cheap steel at about Rs. 25 below British steel bars.

Mr. Mathias.—May I ask how far ahead do you place your orders on an average?

Mr. Trivedi.—Three to four months.

Mr. Mathias.—That is the average.

Mr. Trivedi.—Yes.

Mr. Mathias.—Of course that depends on the state of the trade.

Mr. Trivedi.—Generally it is three months.

Mr. Mathias.—That is for Continental steel.

Mr. Trivedi.—Yes.

Dr. Matthai.—Is that four months from the date of order to the date of delivery?

Mr. Trivedi.—Yes. At present I would sell for October and November shipment.

Mr. Mathias.—Would you look at paragraph 1 of your letter? I am not quite clear about this particular sentence. You say "Also the Board's calculation of the burden to the country went wrong and the protective duties amount to Rs. 215 and 281 thousands in the first two years".

Mr. Trivedi.—It must be lakhs instead of thousands. I am sorry for the mistake.

President.—We will put it this way. We will take the pre-war difference whatever it is. Then, you say that 10 shillings should be added to that. If we do that, it would be about right from your point of view.

Mr. Trivedi.—Yes.

President.—If that difference is maintained, from your point of view, there is no objection.

Mr. Trivedi.—There would be at least some satisfaction.

President.—We have got British f.o.b. prices but we have not got Continental pre-war f.o.b. prices.

Mr. Trivedi.—The difference in freight is only 5 shillings. Generally British is 22 or 23 shillings.

Mr. Mather.—It was below that before the war.

Mr. Trivedi.—The other is 17 shillings. What I want is that the Board should understand sympathetically our case. It is very hard on people living in areas which are not reached by Tata's. They are being taxed unnecessarily and heavily. Take whatever you want from us but not too much.

Mr. Mathias.—Your calculation includes the revenue duty.

Mr. Trivedi.—They say protective duties. I do not know whether they include the 10 per cent. revenue duties or not.

President.—The protective duty includes the revenue duty. In paragraph 5 you ask for the exemption of certain products.

Mr. Trivedi.—You have already done in the case of rounds. What is the position about squares? They are in the same position as rounds. Tata's do not roll them.

President.—You say that rods, rounds and squares below ½" should be excluded.

Mr. Trivedi.—There is at present confusion in the market.

President.—There is always confusion, it seems to me.

Mr. Trivedi.—There is some ambiguity about the Government order.

Mr. Mather.—Is it not clear that squares are not exempted?

Mr. Trivedi.—That is the wording, but the reason which led you to recommend exemption for rounds is equally applicable to squares. May I ask whether that question has come before you?

President.—No, we did not make any recommendation about squares.

Mr. Trivedi.—It was because nobody pointed that out to you. It is an anomaly.

President.—We shall bear that in mind in making our recommendations. I may tell you that in this enquiry the Tata Iron and Steel Company have said that squares below ½″ might be excluded.

President.—What are these steel circles?

Mr. Trivedi.—They are circular plates.

President.—The Tata Iron and Steel Company have stopped making them.

Mr. Trivedi.—You may recommend their exclusion.

President.—What are these octagon steel bars?

Mr. Trivedi.—Bars not perfectly round but having 8 sides.

Dr. Matthai.—What sizes are they?

Mr. Trivedi.—¾″ to 1½″.

President.—Mr. Sawday, do you make octagon steel bars?

Mr. Sawday.—We make octagon bars only in small quantities. They are usually sold in short lengths.

President.—I take it that they form a small percentage.

Mr. Sawday.—Yes.

President.—You don't press for their inclusion, do you?

Mr. Sawday.—No. They are not a matter of any serious importance.

President.—What do you mean by half round iron bars?

Mr. Trivedi.—They are convex.

President.—The Tata Iron and Steel Company has no objection to the exclusion of half round iron bars. Are they wrought iron bars?

Mr. Trivedi.—No. They are known like that. They are actually steel bars.

Dr. Matthai.—What are they used for?

Mr. Trivedi.—For making tyres.

President.—What about defective and waste materials?

Mr. Trivedi.—Tata's are selling these but if we could import these with the revenue duty of 10 per cent. it would be a great benefit to the small manufacturers of hardware articles.

President.—But Tata's themselves are selling them very cheap.

Mr. Trivedi.—Yes, but not in Bombay, Karachi, Madras and Rangoon. They will not be able to sell them in those places. If you take off the duties for ports, it won't affect their sale at all. Nobody will be able to bring them to Delhi as against Tata's.

Mr. Mathias.—Is it your proposal that they should be landed duty free in Bombay but not in Calcutta?

Mr. Trivedi.—Yes.

President.—How can that be?

Mr. Trivedi.—You have to make some provision. What I mean is this. I will give you one instance. Messrs. Kirloskar Bros. have made a representation that they are unable to get them from Tata's. They enquired of Tata's to provide them with waste materials. Tata's could not supply them. Kirloskar Brothers want these materials for making bolts, nuts, etc. Such manufacturers will be helped if you reduce the duty.

Mr. Mather.—The main difficulty about your proposal is that it would be for the Customs to decide in every case whether the articles were cuttings or not.

Mr. Trivedi.—They can do it easily.

Mr. Mather.—I cannot accept that in every case, at any rate in the case of bars. When does a bar become a cutting?

Mr. Trivedi.—It becomes a cutting if it is 3 or 4 ft. long.

Mr. Mather.—Wherever you fix the limit in the length of a bar, the moment you change the duty from say Rs. 40 to Rs. 10 it is going to mean that whenever possible bars will be sent to this country in lengths just below that and consequently evade the tariff.

Mr. Trivedi.—Bar cuttings will be all lengths. You may refer the matter to the Customs authorities. I suggest this in the interests of small manufacturers.

President.—It may be difficult for the Customs authorities to prevent the evasion of the duty supposing we fix the limit at 5 ft.

Mr. Trivedi.—Bar cuttings will not be of uniform lengths. They may vary from 2 ft. to 6 ft.

Mr. Mather.—Supposing they send one bar of 2 ft. in a bundle of cuttings?

Mr. Trivedi.—If you fix even 3 ft. it would help small manufacturers.

Mr. Mather.—It is not really important from your point of view.

Mr. Trivedi.—No. I had Messrs. Kirloskar Bros. in mind. They approached me several times about this.

President.—The prices given in the letter of Messrs. John Batt and Company (London), Limited, are, I take it, for Continental material.

Mr. Trivedi.—Yes, excepting those for galvanized sheets.

Dr. Matthai.—Are the prices given for plates also Continental prices?

Mr. Trivedi.—Yes.

President.—We are very much obliged to you for getting this information because it appears to be fairly reliable.

Mr. Trivedi.—Will the Board like to have these figures also about the difference between Continental, British and American prices? These are dated 31st March 1926, supplied by Messrs. John Batt and Company.

President.—We shall be very glad to have them (handed in).

Dr. Matthai.—Who are these people?

Mr. Trivedi.—They are an export house hundred years old and they have large experience in the field.

President.—It will be very useful. I find from the evidence of Mr. Anandji Haridas that there is a great difference between prices realized by you and prices realized in Calcutta? Can you explain that?

Mr. Trivedi.—In the first place in Calcutta there are more than 150 dealers, small and big, whereas in Bombay we have only 30 to 40 people, so they do not cut prices so much as they do here.

President.—For instance, in January 1926 Mr. Anandji Haridas's price for Continental bars was Rs. 137-8-0 and the price of the Bombay Iron Merchants' Association Rs. 155. We were told that perhaps these were maximum prices or average prices. What are they?

Mr. Trivedi.—I am surprised at the figures. There must be some mistake. It may be for rods.

Dr. Matthai.—You take the average price or the highest price?

Mr. Trivedi.—We take the average.

President.—It occurs in other things too. Take December 1925. Mr. Anandji's price Rs. 137-8-0, Bombay Iron Merchants' Association Rs. 175 for Continental plates.

Mr. Trivedi.—That also must be a mistake. It may also be that the men there have taken $\frac{1}{16}$th″ plates and not the ordinary $\frac{3}{16}$th.

Dr. Matthai.—What generally is the difference between Calcutta and Bombay in bars?

Mr. Trivedi.—We will be higher by Rs. 5.

President.—What is the reason?

Mr. Trivedi.—Here there is more competition whereas in Bombay there are 30 to 40 people; the place for small dealers is quite apart, they do not compete in the market.

Mr. Mather.—Are they nearly all members of the Association?

Mr. Trivedi.—Yes.

Mr. Mather.—So that the price is very largely controlled by the Association?

Mr. Trivedi.—They do not generally meet to control the prices.

Mr. Mather.—There is no such effective association in Calcutta?

Mr. Trivedi.—No.

President.—Will you keep on sending us these c.i.f. prices every month?

Mr. Trivedi.—C.i.f. prices for Calcutta and Bombay would be the same.

President.—We would like to know.

Mr. Trivedi.—I will do so.

President.—Are you in touch with the Continent now?

Mr. Trivedi.—I have a representative there.

President.—Have you received any intimation about the Continental combine?

Mr. Trivedi.—None, except what I read in the papers.

President.—If it comes about and stabilizes prices it may make all the difference to your consumers in the country.

Mr. Trivedi.—Still it will never go up over £7: that is the opinion of all who know anything about it.

Mr. Mather.—Do you think it possible they may try to get it up to £7 or near to £7?

Mr. Trivedi.—Yes, £6-10-0 to £7 c.i.f. India, if the combine takes place.

Mr. Mather.—You are expecting to see a c.i.f. price India between £6-10-0 and £7 in the near future if this combine comes into existence?

Mr. Trivedi.—My opinion is it would hardly go over £7.

President.—Do you import large quantities of heavy structurals?

Mr. Trivedi.—We have angles, tees and joists.

Mr. Mather.—Joists up to what size?

Mr. Trivedi.—Up to 20 x 7.

Mr. Mather.—But the great bulk is of smaller sizes, is it not?

Mr. Trivedi.—Yes, from 4 x 2 to 15 x 6.

President.—What is the difference between Continental steel according to British Standard Specification and other steel? What is the difference in price?

Mr. Trivedi.—Only 5 to 10 shillings.

President.—So that British steel costs always more than Continental?

Mr. Trivedi.—If a customer says he wants to have a guarantee that the steel should be rolled to the British Standard Specification I can always get it for him by charging 10 shillings extra. I had such an enquiry in Bombay from an engineering firm and I did wire to the Continent and got it.

Dr. Matthai.—Have you any galvanized sheets from the Continent in Bombay?

Mr. Trivedi.—Since the last six months the Continent has been competing in galvanized sheets.

Dr. Matthai.—How do you find them in point of quality?

Mr. Trivedi.—It is not bad.

Dr. Matthai.—The bazar is taking it already?

Mr. Trivedi.—Yes at 10 shillings lower. Whenever there is a rise in British galvanized sheets there is a margin for the Continental to come in. They were rolling these but they have not hitherto been coming to India. Before the war my firm had a good deal of consignment, but we only tried them as experiment, but they said they could not compete with England in price. England has a monopoly in galvanized sheets. Even America could not compete.

President.—So far as black sheet is concerned, they are competing?

Mr. Trivedi.—Yes. The present price for 25 sheets is about £7 and for 68 sheets it is £8, so the average is Rs. 105. We can import it at Rs. 105 now. Formerly the 24 gauge was a monopoly of England, now the Continental is also coming in. My own impression is that they are not cutting in order to get a place in India. They are quoting an f.o.b. price. The works do not know where the material will go. They simply deliver f.o.b. They do not quote prices simply for the trade of India.

President.—Who are your principal consumers of black sheet in India at present?

Mr. Trivedi.—Mirzapore is one of the biggest markets. There are various small industries there.

सत्यमेव जयते

7. THE BOMBAY IRON MERCHANTS ASSOCIATION.

Letter, dated 22nd July 1926.

With reference to your letter inviting views of my Association on the application of Tata Iron and Steel Company, Limited, for continuation of protection my Association begs to make the following representation.

They agree that if further protection is to be given it should be for 8 to 10 years. The protection should be given by way of bounties and the necessary amount for the same should be given from the General Revenue and not by taxing only steel consumers as is done at present. Our suggestion is to levy an all round additional duty of a fixed percentage on foreign imports of all kinds of goods.

We further suggest that Company-managed Railways should be compelled by Law to buy their requirements of rails from the country and all foreign rails imports should be taxed heavily so as to make import prohibitive. My Association strongly protests against the policy of putting the whole burden of protection on steel consumers and letting Railway Companies free to buy their requirements from abroad.

My Association requests that as Tata Iron and Steel Company do not roll the following articles on sufficiently large scale protective duties unnecessarily levied on them should be removed and protection on such small quantities as may be rolled may be given by bounties.

(1) Steel rods under $\frac{1}{2}''$ rounds and squares.

(2) Octagon steel.

(3) Half round iron bars.

(4) Steel circles.

Our representative will be glad to give evidence before the Board on any day fixed.

सत्यमेव जयते

8. IRON MERCHANTS OF CALCUTTA.

Letter, dated the 11th August 1926.

The undersigned Iron Merchants of Calcutta, meeting in a Conference at 13, Durmahatta Street, Calcutta, on the 11th August 1926 at 2 P.M., under the Chairmanship of Mr. Anandji Haridas of Messrs. Anandji Haridas and Company have passed the following five resolutions for the consideration of the Tariff Board in connection with their enquiry as to continuing from April 1927 the protection granted to Messrs. The Tata Iron Steel Company, Limited

Resolutions.

1. "That we are of opinion that if the Tariff Board recommends to Government to purchase Indian steel to meet the requirements of all the State Railways and other Government Departments and requests Government to induce all Company-managed Railways, Municipalities, District Boards and other like public bodies to do the same, even at a preferential price as compared with the price of British materials, the Steel Industry will surely find an ample opportunity for development."

2. "That we are not in favour of further increase of the present protective duty which is already very excessive and presses hard upon the consumers and that we hold that if the income from the present protective duty be not found adequate to give full protection to the Steel Industry, further protection be given in the shape of bounties to be financed from the general revenue, as the country as a whole stands to benefit by the existence of a national industry like the Steel Industry and as it is but fair that the whole country (and not the consumers of Steel only) should bear the burden of further protection."

3. "That we request the Tariff Board to recommend to Government to reduce the protective duty on G. C. Sheets by at least Rs. 15 per ton in view of the fact that practically nothing out of the 20,000 tons annually produced at Jamshedpur is consumed in Bengal which alone imports about ⅔rds of the total quantities imported in the whole of India and that the proposed reduction will not only give the much-needed relief to the poorest classes of the province who are the principal consumers of this article but will also cause a big increase in the demand bringing in sufficient revenue to Government to compensate the loss caused by the reduction in duty."

4. "That we request the Tariff Board to recommend the remove of protective duty on M. S. Square rods under ½″ as they have already done in the case of M. S. round rods under ½″ in view of the fact that the steel works at Jamshedpur do not roll such rod and they themselves have admitted that removal of the protective duty on such rods will not affect them."

5. "That we are of opinion that with a view to give relief to the importers of steel who have been paying heavy protective duty the Tariff Board should recommend to Government to make arrangement to store in Bonded Ware-Houses at a reasonable rent at the request of the importers steel materials on which duty is not paid before landing of the same, as such arrangement will save them from the liability of paying wharfage."

If you deem necessary we shall be glad to send our representative to give evidence before your Board.

Though we have been somewhat late in presenting these views of ours for your consideration, we hope, you will kindly in consideration of the fact that we represent the Iron Trade in this part of India and that further protection to Steel Industry by increase of already excessive protective duty is likely to seriously affect the Steel Trade in Bengal waive any technical objections and give our views your best consideration.

9. CHAMBER OF COMMERCE, MADRAS.

Representation, dated the 8th May 1926.

I have the honour to acknowledge receipt of Press Communiqué, dated 16th April 1926, on the subject of the necessity or otherwise for the continuation of protection of the Steel Industry in India.

I am directed in reply to enclose copy of my letter* to you, dated 8th of September 1923, on this subject and to state that the views therein expressed still hold good.

I would specially draw your attention to paragraph 6 which reads:—

> "This Chamber is not averse to assistance of a *temporary nature* being granted to new industries *provided* the evidence obtainable justifies the belief that such industries will, if sufficiently conducted, become self-supporting within a reasonable period of time."

It is the considered opinion of this Chamber that unless there is a reasonable hope that the Indian Steel Industry will become self-supporting in the near future, there cannot be any case for a continuation of the protection now being granted.

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* See page 84 of Vol. III of the Evidence recorded during the first enquiry into the Steel Industry.

सत्यमेव जयते

10. BURMA CHAMBER OF COMMERCE.

Representation, dated the 5th May 1926.

My Committee have read with interest your Press Communiqué, dated April 16th, 1926, in reference to the inquiry by the Tariff Board as to whether it is necessary to continue the protection of the Steel Industry and as to the duties and bounties which may be necessary for the purpose of conferring such protection.

2. In reply, I am directed to say that this Chamber has all along protested against the protective duties on steel being made applicable to Burma, *vide* my letters of September 1st and 29th, 1923, to which I would refer you. Meanwhile, I am to say that my Committee confirm the views expressed in those letters, and urge, if Protection is to be continued that bounties be substituted for protective duties.

सत्यमेव जयते

11. INDIAN CHAMBER OF COMMERCE, CALCUTTA.

(1) *Representation, dated the 1st June 1926.*

With reference to the correspondence regarding submission of Chamber's representation in regard to Board's enquiry under provisions of section 6 of the Steel Industry (Protection) Act, 1924, and ending with your letter No. 268, dated the 21st May 1926, I am directed to forward a memorandum by the Committee of the Indian Chamber of Commerce in regard to the enquiry which the Board have now in hand. The submission of the memorandum has been delayed by one day which, I am to express a hope, will kindly be overlooked by the Board.

Memorandum submitted to the Tariff Board in connection with the enquiry undertaken under provisions of section 6 of the Steel Industry (Protection) Act, 1924.

In this Memorandum the Committee of the Indian Chamber do not propose to examine generally what case there is for a continuance of the Steel Protective duties under the Steel Industry (Protection) Act, 1924 after the 31st of March 1927. That is an examination which can only be undertaken with the definite knowledge of facts and figures relative to the cost of production of the concern engaged in steel production and the prices it has been realising at the present moment and the outlook of these two positions in the future. Clearly, therefore, the Indian Chamber do not feel competent to enter into this question at this stage. There are, however, one or two questions in the nature of readjustments of the present scale of duty which the Committee of this Chamber desire to bring forward before the Tariff Board. The Committee feel that having regard to the vital importance of the proposals which will presently follow, they deserve to be considered along with the original applications submitted before the Board urging the continuance of the protective measures.

2. The Committee desire to add here one more work by way of preface. It should not be understood from the proposals conveyed in this memorandum that they are opposed to a general continuance of the protective duties after the 31st March 1927. On the other hand, they are strongly of opinion from facts generally within their knowledge that protection granted to the Steel Industry has been useful in the past and its continuance would be essentially necessary, at least for some years to come. As they have already stated, absence of definite facts and figures preclude their making any very close examination of the question and in the circumstances they merely rest content with putting forward the two specific proposals which are in the nature of amendments to the protective measures now in force.

3. It appears to the Committee that the scheme of protection hitherto in operation has been very fundamentally defective in one respect. The protective duties have been made to yield a far larger revenue than what has been or was estimated to be the requirements for protective purposes *ad hoc.* The total amount granted as bounty within the full term of Steel Industry (Protection) Act is 140 lakhs of rupees, whereas the actual revenue earned by the Government from protective duties on iron and steel has been 215 lakhs of rupees in 1924-25 and 281 lakhs of rupees in 1925-26. In other words, the consumers are being needlessly exploited far above what is legitimately required in the interest of Steel Industry. A most glaring case which strikes the Committee is that of the duty on galvanised sheets fixed at Rs. 45 per ton. The Committee of this Chamber are strongly of opinion that this heavy rate of duty admits of a distinct reduction by at least Rs. 10 per ton. The present unfortunate position of earning a plethoric revenue from protection duties arose from a grossly under-estimated import demand of galvanised sheets in this country. The Board in their last enquiry in June 1925 estimated the importation of galvanised sheets at 190,000 tons and of the current financial year at 180,000 tons. Actually, however, these figures have been

found to be very much under-estimated. The import of 1925-26 has been nearly 280,000 tons and on all calculations there seem to be little prospect of a reduced import in the current financial year. The demand for galvanised sheets which is largely consumed in Eastern Bengal by the poorer classes is particularly of an elastic nature, and lower prices is certain to augment consumption. In any case, it is the view of the Committee that an import of 250,000 tons can be safely depended on for any calculations as regards the earning of revenue from protective duties on this particular class of goods. The Committee are aware that in the last financial year the boom price of jute realised by the cultivator in the Eastern Bengal districts reflected to a certain extent on the consumption of galvanised sheets. But it is equally important to remember that India's consumption of galvanised sheets last year was affected adversely owing to famine conditions prevailing in Bombay and depression in the leading trade of the Western Presidency. At all events, the Committee are emphatically of opinion that the figure referred to above can be fully regarded as representing India's annual demand of imported galvanised sheets.

4. The Committee feel it necessary to explain here their reasons why they particularly single out galvanised sheets as the item for reduction of duty. In the first place, the demand for this class of goods is rather elastic within a certain range a fact which has already been referred to. Secondly, this is an article which is very extensively used by the poorer classes in the Eastern Bengal and thirdly and this is equally an weighty reason—the incidence of duty on galvanised sheets falls heavily on the province of Bengal which takes on an average over 60 per cent. of the imported galvanised sheets. As the facts stand to-day, the brunt of the protection is being borne by Bengal, this Province alone contributing on the single item of galvanised sheets about 75 lakhs of rupees, or in other words paying more than the amount required to be paid as bounty to the Steel Company in one year. Fourthly, the India's production of the galvanised sheets bears only a small percentage to the total consumption of the article, the bulk of which is met by foreign manufacturers. The Committee recognise that the suggested reduction of duty on galvanised sheets by Rs. 10 per ton will force the Steel Company to realise a lower price on the sale of these goods than what they have been doing at present. In full sympathy, as the Chamber is, with the principle of protection, the Committee propose an additional bounty to the Steel Company on their production of corrugated sheets to the extent of the fall in prices per ton which may follow consequent on the adoption of this proposal. On an estimated import of 2 lakhs 50 thousand tons, the revenue earned at the reduced rate of Rs. 35 per ton works out at Rs. 87·5 lakhs a figure which exceeds by about 3 lakhs the revenue to the Government on an import of 1,80,000 tons at the rate of Rs. 45 as estimated by the Board. The margin of this Rs. 6 lakhs, as would doubtless be clear should be enough for payment of an additional bounty on galvanised sheets, seeing that the total production of the Steel Company is likely to be in the neighbourhood of 20,000 tons in the near future.

5. There exists at present an unsatisfactory position in regard to the classification of black sheets for the purpose of Customs duties. The duty on black sheets falls under two classes, one being a specific duty of Rs. 30 a ton and the other an *ad valorem* duty of 10 per cent. on valuation of Rs. 200 per ton in respect of sheets of certain classes such as pickled, cold-rolled, smoked or cleaned by acid. The result has been that the merchants started importing sheets of the second category which bears a small extra cost thus escaping Rs. 10 per ton in respect of duty in such cases. On representation being made the custom authorities have adopted the principle of charging *ad valorem* duty in respect of sheets invoiced at £16 or more, otherwise classifying them for a specific duty. This change in the rate of assessment has naturally entailed losses to the merchants and it is of importance that at this stage the Tariff Board should recommend a more definite classification so that the custom authorities may have no scope for exercise of discretion in fixing the rate of duty chargeable.

(2) Letter from the Indian Chamber of Commerce, Calcutta, dated the 2nd August 1926.

I am directed to refer to the Board's Press Communiqué, dated the 14th July last in which written representations of views of those who wish to support or oppose the grant or continuance of protection to the Steel Industry were invited.

2. Agreeably to the terms of the communiqué I am directed to forward herewith a memorandum discussing the question of anti-dumping legislation raised by the Tata Iron and Steel Company in their application dated the 7th May. The Committee regret that the memorandum having to be prepared after a great deal of careful attention, it was not possible to submit it within the 24th ultimo. They nevertheless, trust that it will receive a full consideration by the Board.

A further memorandum submitted to the Tariff Board outlining proposals regarding anti-dumping legislation.

In their application submitted to the Board the Tata Iron and Steel Company put forward proposals regarding anti-dumping legislation to be recommended by the Board to the Government of India. In a separate note contained in enclosure 12 attached to their application the Company formulate specific proposals in this direction. Briefly stated it is suggested that a special dumping duty of 5 per cent. should be levied on the goods imported from the countries whose currency has depreciated from its parity with gold by more than 20 per cent. From that point a sliding scale of extra duty of 5 per cent. is asked for each further depreciation of the currency by 10 per cent.

2. While fully appreciating the necessity for anti-dumping legislation in India the Committee of the Indian Chamber do not consider that the proposals for legislative measures put forward by the Tata Iron and Steel Company are broad enough. The French currency has depreciated from 86 in November 1924 to 160 in June this year but the fall in the price for the continental goods was not commensurate with the fall in the exchange value of the franc. The danger, nevertheless of exchange dumping is serious enough, as is borne out by the fact that a series of measures were taken in England, France, Switzerland, Spain and elsewhere with a view to safeguard the position of home industries against the competition of countries with depreciated currency. But it is difficult to state if any legislative proposals based on mere movements of exchange can adequately protect industries against effects of currency depreciation. In the first place, an exchange dumping duty can easily be avoided by the competing countries by quoting in stable foreign currency. Secondly goods can be exported from abroad to the home market on consignment. Thirdly a violent debacle of exchange in an important country may lead to price-cutting of the same class of production in other countries also. In this case though the exchange situation fully reacts on the competing position of other countries, it is impossible to deal with the latter under any legislative proposals based on the movement of exchange. Such a possibility discloses another inherent danger of the present-day state of International commerce. In a period of trade depression the tendency is often present on the part of the manufacturers to keep the level of production and the consequent sales abroad at any price covering the prime cost and thus to outset the rivals. Such "predatory competition," as it has been called, has been one of the most serious danger which a manufacturing country has got to guard against in the recent years. In such cases the price of foreign commodity is likely to depress continually and no accurate idea as to the normal position of com-

petition could possibly be ascertained. The action of cartels, trusts or other influential combination is also a source of danger against the development of national industries.

3. It, therefore, appears to the Committee that a legislative measure merely to guard against exchange dumping is not likely to be effective. The law can be fully evaded through channels already indicated. Moreover, there are other allied sources of danger from which foreign dumping can be looked for. The plan for anti-dumping legislation has, therefore, to be laid deeper and broader than what has been suggested by the Tata Iron and Steel Company. The need for such legislation arises from a continually changing nature of the conditions under which competition has got to be met by the home industries, once the foreign commodities are dumped in the home market. It is the necessity for continual adjustment and readjustment and which requires a definite formulation of legislative principle, so that action can be taken whenever required without elaborate reference and widespread discussion. Such a task is not for the Tariff Board to accomplish, who go thoroughly into the conditions of production of home industries and recommend tariff assistance as it may be necessary under normal conditions of competition. The case for anti-dumping legislation rests on the abnormality of the situation and does not derive its economic justification from any principle of protection. As Prof. Gregory says, "There is no inconsistency in free-trader believing in the right to levy an anti-bounty duty—it may be often possibly urged that it is his duty to support the enactment of such duty." (Tariff page 179.)

4. Turning now to the scope of the legislation the Committee of the Indian Chamber would suggest the adoption of the provisions of the South African Custom Tariff and Excise Duty Amendment Act of 1925. In other words, the Committee would suggest legislative measure not only of anti-bounty or anti-dumping character but one intended generally against all forms of unfair competition. Apart from the 5 clauses in section 8 (*1*) of the South African Act just now referred to, a general clause as found in the Australian Preservation of Industries Act (copy attached) should be added in the Indian legislation. The machinery of the administration should be a permanent Board of 5 members representing commercial and industrial interests who should recommend action to be taken to the Government of India. The Board, however, need not consist of whole-time salaried members. They may assemble from time to time where necessary to decide questions which they should be competent to examine on their own initiative. The recommendation of the Board should for all practical purposes be obligatory on the Government of India. Once the legislative principle has been defined, and an expert Board has examined a particular question in the light of this principle, it is only fair to expect that the Government should not reverse the recommendations of the Board. The Committee of the Indian Chamber consider both the creation of the Board and the obligatory character of their recommendation as essential features of any legislation that may be undertaken in this direction. For even under the present fiscal law under section 8A of the Indian Tariff Act, 1894, the Government have very large powers to deal with cases of bounty-fed foreign competing industries. But for the 25 years that the provisions of law have been on the Statute Book the Government have not exercised this power except on one occasion. As regards the remedial action against the conditions of unfair foreign competition, the Committee would be satisfied with what has been provided for in section 8 (*2*) of the South African Tariff Act of 1925.

5. In conclusion the Committee would again reiterate their view already expressed that a scheme of protection once devised may be very easily rendered ineffective under the changing conditions of modern International commerce. Even with regard to the application now before the Board it is no doubt possible to arrive at certain conclusions on the present conditions of production and currency value, but it is difficult to take a fairly long forecast as to the stability of the present conditions. What is otherwise abnormal in the economic life can be normally reckoned on and as such, measures are necessary to be taken to deal with them on a permanent basis.

An extract from the Australian Preservation of Industries Act (referred to in paragraph 4 of the memorandum).

"Competition shall be deemed to be unfair unless the contrary is proved, if (*a*) under ordinary circumstances of trade it would probably lead to the Australian goods being no longer produced or being withdrawn from the market or being sold at a loss unless produced at an inadequate remuneration for labour; or (*b*) the means adopted by the person importing or selling the imported goods are, in the opinion of the Comptroller General or a Justice as the case may be unfair in the circumstances; or (*c*) the competition would probably or does in fact result in an inadequate remuneration for labour in the Australian industry; or (*d*) the competition would probably or does in fact result in creating any substantial disorganisation in Australian industry or throwing workers out of employment . . . ."

(Vide *Gregory—Tariff, p. 188.*)

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12. SOUTHERN INDIA CHAMBER OF COMMERCE, MADRAS.

Letter, dated 5th July 1926.

The circumstances in which the Tariff Board made an enquiry last year have not materially changed yet. But there is no doubt that the Board have greater responsibilities in estimating conditions in the steel industry after March 1927. A material factor that guided their recommendations after the last enquiry was that the manufacturers have to be compensated for the higher Exchange which was taken as an established fact. That is a point to be reconsidered in view of the decisions on the report of the Royal Commission on Indian Currency.

Another factor which might materially alter the position of the Board in regard to the degree of protection to be extended is the possibility of continental prices firming up by the time the present Steel Protection Act expires.

My Committee have noted with pleasure that the Board have carefully considered the consumer's standpoint and appreciate the care with which the Board attempted to approximate the customs revenue to the bounties recommended by them. It is however observed with concern that the divergence between them tends to increase in practice, though the Committee recognise that it is partly due to unexpected imports in certain lines such as galvanised sheets for the tea industry.

In the circumstances my Committee feel that the Board would be well advised to scrutinise the case for reduction of the present rates of duty, particularly on tin, wire, and galvanised sheets, and devise the bounties, if necessary at enhanced rates, so as to bring them closer to the customs revenues resulting from the protective tariff.

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13. BURMA INDIAN CHAMBER OF COMMERCE.

Letter, dated the 12th July 1926.

With reference to the Government of India, Commerce Department Resolution No. 260-T. (64), dated the 3rd April 1926, I am directed by the Committee of this Chamber to send herewith their views on the question of the continuance of protection to the Indian Steel Industry.

Memorandum submitted to the Tariff Board in connection with the enquiry undertaken under Provisions of Section 6 of the Steel Industry (Protection) Act, 1924.

In this memorandum, the Committee of the Burma Indian Chamber do not propose to examine the question of the continuance of protection to the Steel Industry in details, as all the materials required for such a detailed examination are not accessible to them. They believe, however, that the protection and assistance, granted to the Steel Industry have been useful so far and are of opinion that for some time to come, protection is absolutely essential. The Committee of the Chamber feel, however, that protection affords benefit principally to a particular concern only and although they recognise its considerable importance from the point of view of national interests, it would be but fair, if the Tariff Board, while continuing protection, were to institute a searching enquiry as to whether the manufacturing cost in India which, the Committee believe, is too high at present could be reasonably reduced. Conditions in India attending this industry are quite different from those prevailing in other manufacturing countries. Any comparison, therefore, between the cost of production in India and that in other countries would be out of place. At the same time it is essential and necessary that efforts should be made to put the present vast difference between the cost of production in India and other countries on a more rational basis; and the interests of the consumers should not be lost sight of altogether.

The Committee of the Chamber believe that the scheme of protection now in operation is obviously defective in one fundamental respect. The protective duties have been made to yield a far larger revenue than what was estimated to be the requirement for protective purposes. Whereas the actual revenues realised by the Government of India from the steel protective duties amounted to Rs. 215 lakhs in 1924-25 and Rs. 281 lakhs in 1925-26, the total amount granted as bounty within the full term of the Steel Industry (Protection) Act is Rs. 140 lakhs only, which means that the consumers are unnecessarily made to bear the burden of a tariff which is out of all proportion to the legitimate needs of the interests of the industry. It also suggests the conclusion that protective duties are also an objective towards augmenting the Government revenues. There are many items of manufacture, high protective duties on which have acted very harshly on the trade and the consumers and the Committee of the Chamber therefore feel that an equitable re-adjustment of these duties is absolutely necessary. They beg to suggest that the protective duties should be so adjusted as to yield just sufficient to meet the cost of bounties required to be paid. They realise that producers will realise a lower price for those items, on which the duty is reduced but they can be compensated by bounties which should be given to the extent of the fall in price, the amount of such bounties to be taken into consideration in the readjustment of the duties suggested above.

14. MR. R. SITARAMAN.

Letter, dated 20th July 1926.

As a fresh enquiry into the matter of protection for the Steel Industry on the expiry of the present protection afforded to the Tata Iron and Steel Company Limited is being made, I think it is time for making a representation which will be found to be of permanent benefit not only to the Steel Company but also to the Tax-Payers. I am consequently placing before you certain proposals, a consideration of which should enable you to make such recommendations to the Legislature as will afford this Key Industry an opportunity to place its finances on a sound footing.

At the time when protection was sought for and the first enquiry made, it was arranged that certain additional duties should be levied on all imported Steel, but within the space of a year of the passing of the Act, it became necessary on account of fluctuations in Exchange to increase the protection and grant a subsidy. It has become evident from experience since the granting of subsidy and affording of protection that the methods so far adopted have barely kept the Steel Industry alive as the Steel Company has not only been unable to liquidate their floating loans but owe in the shape of dividends, two crores of rupees to shareholders. They have been further unable to find enough money for the developments that they desire to make and thus reduce the cost per ton of Steel.

According to the present calculations the Steel Company expect to reduce the cost of Steel to Rs. 93 per ton only after seven years, *viz.*, after the financial year 1933-34. There is no doubt that this ultimate reduction in costs can be arrived at only after the intended developments in the plant have been made for more economic working and for which there should be enough capital. In the latest Balance Sheet published by the Steel Company, the writer finds that over four crores of rupees have been borrowed at rates of interest varying between 7 to 9 per cent. and taking for the purpose of this representation an interest charge of an average of eight per cent., it will mean a recurring expenditure of 32 lakhs of rupees per annum. From information available to me, the amount of four crores of rupees that have been borrowed can be discharged as quickly as funds are available, as I understand these are demand loans.

To place the industry on a solid and sound basis, a more satisfactory method than the granting of a bounty will be for the Government to advance this amount of four crores of rupees without charging any interest for the next seven years, that is up to 1933-34 and afterwards for the Government to charge 4½ per cent. interest until this loan is cleared.

The Government has been able to borrow recently at the rate of 4½ per cent. (as their issue was at 87 carrying 4 per cent. per annum) and if this loan is granted to Steel Company, the Tax-Payer will have to incur an expenditure of only 18 lakhs of rupees for every year for the next seven years whereas according to the evidence collected by the Tariff Board from the Steel Company, it is clear that this Company not exist without a bounty of 36 lakhs of rupees every year up to 1933-34 to meet their on-costs over works costs such as interest on loans and dividend at 6 per cent. on Capital invested.

If my suggestion is recommended, there will be a saving of 18 lakhs of rupees to the Tax-Payer every annum for the next seven years or a total saving of one crore and twenty-six lakhs of rupees. No credit has been taken for interest on a bounty claimed during these years which may be safely taken at 5,50,000.

This scheme should be given preference over the bounty for the reason that the benefit to the Tax-Payer in the next seven years is Rs. 95,50,000 as will be evident from the summary given below:—

	Rs.
Bounty for 7 years	216,00,000
Interest	5,50,000
	221,50,000
Less Interest charged on loan for 7 years at 18 lakhs per annum	126,00,000
Net Saving	95,50,000

While advancing this amount to the Steel Company, the Government can insist on the Steel Company providing a Sinking Fund of 15 lakhs of rupees per annum to be invested in Government Securities as the Steel Company will be in a position to set aside the following amounts every year as their anticipated profit, when the additional protection is granted to them is 205 lakhs.

	Rs. Lakhs.
1. Depreciation	80
2. Sinking Fund to be earmarked for paying off the proposed Government loan of 4 crores at the end of 20 years	15
3. Payment of a dividend of 8 per cent. on a Paid up Capital of Rs. 10,50,00,000	84
Interest on Rs. 3,34,00,000 (Sterling Debentures) . .	26·72
TOTAL .	205·72

With the depreciation that will be available year after year, the Company will be in a position to carry out all their development programme and further able to set apart an additional Sinking Fund of 15 lakhs of rupees annually to pay off Sterling debts equivalent in Indian Currency to Rs. 3,34,00,000 which will still be due after clearing off the demand loans above mentioned. This scheme will, it should be conceded, place the Steel Company on a permanent footing provided that no further abnormal conditions arise on account of deflated exchange of any country manufacturing Steel such as Belgium.

It has been the accepted policy of the Legislature to afford protection to an industry in the initial stage to such an extent as to make it fully self-supporting after a period and as such a scheme embodying a method to arrive at this stage should appeal to those interested in the Country's Key Industry. Some Provincial Governments have already copied the concessions granted by the Trade Facilities Act in England by granting loans to deserving Industries and the Imperial legislature will not be creating a precedent in this respect.

The Steel Company in their evidence anticipate that it will be possible for them at the end of the financial year 1933-34 to stand on their own legs as their calculation of total profits is Rs. 2,33,00,000 which according to the present scheme can be utilized as under:—

	Rs.
1. Depreciation	80,00,000
2. Payment of 8 per cent. Dividend on a capital of Rs. 10,50,00,000	84,00,000
3. Payment of interests on debentures of Rs. 3,34,00,000 at 8 per cent. . . .	26,72,000
4. Sinking Fund for redeeming Debentures and Government loans	30,00,000
5. Leaving a Surplus	12,28,000
TOTAL .	2,33,00,000

The two evils which the Steel Company had to face are—

(1) Over capitalisation,

(2) Heavy rate of interest of loans,

and the present scheme, therefore, embodies suggestions to give the Company relief on these counts. The granting of a loan to the Steel Company was moved by Burn and Company in the first enquiry only as far as the erection of a Steel Furnace was concerned but it was thrown out by the Tariff Board on the ground that no representation was made by the Steel Company for this purpose. An advance to the extent suggested by Burn and Company would not have been of any material benefit to the Steel Company. The present one aims at a permanent basis of relief and the advantage is, therefore, obvious.

Though I am not at present in the Steel Trade, I make the above suggestions as the problem is nothing peculiar to the Steel Industry but a matter absolutely for finance.

The writer will be quite willing to give any further information in this connection if called upon by the Tariff Board.

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15. COLLECTOR OF CUSTOMS, CALCUTTA.

(1) *Letter, dated the 28th July 1926.*

I enclose 6 copies of Clement's notes. The first two pages were written on the 23rd May 1925, the remainder on the 20th January 1925.

Enclosure.

Mr. Clement's Notes.

Since the annexed report was written references have been made to the Central Board regarding several of the questions discussed, and where rulings have been issued they are noted in the margin.

There is one other subject which calls for discussion, *viz.*, whether cast steel made by any process other than by melting down blister steel in crucibles and pouring it into ingot moulds, shall be assessed at the specific rate of Rs. 40 per ton.

A copy of the correspondence, in linked file, giving rise to the discussion may be attached to the report to be submitted to Government; and it should be noted that the Metallurgical Inspector in his report defines the term "cast steel" as meaning the product of a definite process: this is not the modern conception.

Cast steel is a term which used to be understood to mean steel made by the crucible process, but the term has become very misleading and very indefinite, since all steel except the converted bar (iron converted by the cementation of carbonizing process) is cast; and manufacturers of cast steel proper, in quoting, contracting, or advertising, have been obliged to add the word "crucible" when describing the quality of their steel.

They have had to do this to protect their interest therefore what was formerly known as "cast steel" is now termed "crucible cast steel;" so called because it is made by melting the ingredients in fireclay, or plumbago pots or crucibles.

To facilitate the working of the steel protective tariff it is desirable that a competent authority shall state the main divisions of the steels imported.

There is steel—harder and stronger than structural steel—which is not alloy steel as defined by the Central Board and which will not temper. Such steel is being passed as other sorts, at ten per cent. *ad valorem* but this practice may be challenged at any time, and it is urged that the Board shall lay down standards whereby it will be possible to differentiate between protected and non-protected steel, and it is suggested that the testing requirements of the Engineering Standards Committee shall be taken as the basis of such differentiation.

A reference to the Metallurgical Inspector's letter will show that it is often difficult to make classifications by methods of manufactures.

PART I.

Following the introduction of higher duties on iron and steel, importers have made many attempts to pass low carbon steel at the more favourable rates fixed for iron, high carbon or alloy steels.

We have frequently dealt with importations of a composition iron and steel, designated in the invoices as continental iron, and given numbers corresponding to the grades ordinarily exported from continental ports.

Another misleading invoice description and declaration often made by firms importing for tea gardens and jute mills is "angle iron," a generic term which may mean either iron or steel angle. Such cases have to be dealt with by taking samples and testing whether the material is iron or steel.

Many contentions have also been dealt with in connexion with hoops, and we have badly felt the need of a definite standard. This difficulty has been ameliorated by amending the tariff description in the 1925 tariff schedule, but a more definite differentiation is desirable.

As was to be anticipated difficulties of administration of the new Steel Tariff have arisen which could not be foreseen, and it is only after a period of operation that the difficulties are disclosed.

Part two of this report contains specific cases, and the questions arising from them, and this part of the report will describe the methods employed at this Custom House for the classification of the various grades of iron and steel in accordance with the Tariff Schedule descriptions.

Classification up to the present time has been based on two tests, *viz.*, measurement of hardness and microstructure.

Measurement of hardness.—Different methods and instruments have been devised for measuring hardness, and the one employed here determines hardness by an impression formed with a steel ball pressed into the sample and a test bar of known hardness by the same blow.

Measurement of the diameters of the two impressions thus formed are compared with a table of Brinell numbers: there is a fairly definite relation between these hardness numbers and the tensile strength of the metal.

The following table shows some results obtained using Brinell's hardness test:-

TABLE A.

Influence of the percentage of carbon on a set of steels containing somewhat varying percentages of Silicon and Manganese.

CHEMICAL COMPOSITION.					Hardness number for annealed material.
C.	Si.	Mn.	S.	P.	
Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	
0·10	0·007	0·10	0·020	0·026	97
0·20	0·018	0·41	0·015	0·027	115
0·25	0·30	0·41	0·012	0·028	143
0·35	0·26	0·49	0·015	0·027	156
0·45	0·27	0·45	0·018	0·028	194
0·65	0·27	0·49	0·011	0·028	235
0·66	0·33	0·18	0·010	0·028	202
0·78	0·37	0·20	0·011	0·028	231
0·92	0·28	0·25	0·012	0·026	258
1·25	0·60	0·20	0·015	0·027	262

In taking tensile stress corresponding to different percentages of carbon in commercial steel discrimination is necessary as the strength of the material for the same carbon content will vary according to the process of manufacture, the size of the finished section, and the percentages of other impurities, present. As regards process of manufacture and the presence of impurities, microscopic examination enables the observer to state, in most cases, the treatment and composition: a few brief notes concerning this will be found under the heading "microstructure."

The following table gives approximately, what may be expected from steel of good quality in which the Manganese does not exceed ·8 per cent. When Manganese is above ·8, the tensile stress will be considerably higher. The tensile stress for basic steels above ·5, carbon is not given.

Acid Bessemer and basic Bessemer steels will not differ greatly from open-hearth steel in tensile strength, especially in low carbon steels, and comparatively little high carbon steel is made by these processes except for rails.

TABLE B.

Carbon per cent.	Acid Open Hearth tensile stress in tons per square inch.	Basic Open Hearth tensile stress in tons per square inch.
·05 to ·10	·21 to ·27	·20 to ·25
·10 to ·15	·24 to ·29	·23 to ·27
·15 to ·20	·27 to ·32	·25 to ·29
·20 to ·25	·29 to ·34	·26 to ·30
·25 to ·30	·30 to ·35	·28 to ·32
·30 to ·35	·31 to ·37	·29 to ·33
·35 to ·40	·35 to ·41	·31 to ·35
·40 to ·45	·39 to ·45	·34 to ·40
·45 to ·50	·43 to ·48	·38 to ·43
·50 to ·55	·47 to ·53	......
·55 to ·60	·50 to ·55	......
·60 to ·65	·52 to ·57	......
·65 to ·70	·55 to ·60	......
·70 to ·75	·58 to ·62	......
·75 to ·80	·60 to ·64	....
·80 to ·85	·61 to ·65	......
·85 to ·90	·63 to ·67	......

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The value of comparisons with the foregoing tables will be appreciated by reference to the testing requirements of the Engineering Standards Committee, extracts from which are given below:—

Steel Plates.	*Tensile breaking stress tons per sq. inch.*
For Bridges A steel	28 to 33
General building construction A steel	28 to 33
General building construction B steel excluding plates ¼″ thick and over	28 to 33
Ships	28 to 32
Marine Boilers	28 to 32
Marine Boilers (for flanging)	26 to 30
Ships for Cold flanging	26 to 30
Steel Sectional material and Bars other than	
For Locomotive frames	28 to 32
Carriages and wagon underframes	28 to 32
Bridges A steel	28 to 33
General building construction A steel	28 to 33
General building construction B steel	28 to 33
Ships	28 to 33
Locomotive Boilers	26 to 30
Marine Boilers (stay angle and T Bars)	28 to 32
Marine Boilers (combustion chamber stays)	26 to 30

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Microstructure.—Chemical analysis as usually carried out is no guide to the structural condition and mechanical properties of the metal.

On the other hand microscopic examination of a ground, polished and etched section of the metal enables the experienced worker to determine the composition and treatment.

The etching acid attacks the various components of the structure to different extents and under the microscope the prepared surface discloses different constituents to which names have been given.

Thus nearly pure iron (carbon not more than 0·03 per cent.) consists of relatively large interlocking crystals of ferrite, and can be scratched with a needle. On the other hand, steel contains a large proportion of iron carbide, which is hard and not attached by the etching agent: this ingredient therefore stands out in bold relief under the microscope and is known as cementite. Pearlite, so called from its resemblance to mother of pearl, is seen under high magnification to consist of alternate laminae of cementite and ferrite. A steel containing about 0·9 per cent. carbon entirely of pearlite. With less than 0·9 per cent. of carbon, as, for example in steel for boiler plates, etc., the structure consists of pearlite and ferrite.

The following table shows the theoretical microstructural composition of unhardened Carbon Steels.

TABLE C.

Carbon per cent.	MICROSCOPIC COMPOSITION PER CENT.		
	Pearlite.	Ferrite.	Cementite.
0·10	...	100	...
0·20	12	88	...
0·30	25	75	...
0·40	37	63	...
0·50	50	50	...
0·60	62	38	...
0·70	75	25	...
0·80	87	13	...
0·90	100	...	...
1·00	98	...	2
1·10	97	...	3
1·20	95	...	5
1·30	93	...	7
1·40	91	...	9
1·50	90	...	10
1·60	88	...	12
1·70	86	...	14
1·80	85	...	15
1·90	83	...	17
2·00	81	...	19
2·10	80	...	20
2·20	78	...	22
2·30	76	...	24
...	74	...	26
2·40	73	...	27
2·50	71	...	29

The detailed classification of data or information to be deduced from microscopical examination of iron and steel is as follows:—

Irons . . .	Presence of slag, size or grain, discolouration of ferrite after etching, owing to the presence of impurities.
Steels . . .	Presence of slag, size of grain, estimation of carbon content, mechanical treatment—(Widmanstaetten structure indicating normal treatment, banded distribution of the pearlite including different mechanical properties in different directions), indications of local cold work.
Special Steels . .	Determination of the characterstic structure (pearlite, martensite, polyhedral structure, complex carbides).

A mass of other information which does not concern us in the administration of the Steel Tariff can also be deduced.

PART II.

The sample received at Calcutta gave a tensile strength of 32 tons and the surface and edges differed from those of hoops.

Being a rolled section of small dimensions and the tensile strength being only equal to ordinary structural steel the ruling of the Central Board raises the important question as to the kind of bars admissible as Common Merchant.

Before the Steel Tariff came into force, sections produced by Guide mills and Rod mills were bracketed with Common Merchant sections, and we have continued this practice, but the present ruling suggests that our practice is wrong since the subject of the ruling proves to be light section flat bar produced on a Guide mill, which is the mill on which rounds below $1\frac{1}{4}''$ in diameter or similar small sections down to $\frac{5}{16}''$ rounds, squares, ovals, or other sections of about the same weight per foot are rolled, and is termed a Guide mill because it must have a guide to hold the bar on edge when it is being entered because it cannot be properly handled by the workman's tongs.

Other merchant bars are produced by merchant mills which have rolls from 22 to 14 inches diameter.

These mills produce sections such as a merchant is expected to keep in stock, and in a recent ruling on tinplate bars this has been interpreted to mean sections such as a merchant ordinarily stocks in India. Another authority defines Common Merchant to mean Bars not branded with a makers mark such as "Best," "Crown," "Special."

Importers claimed entry for steel wire rods and steel wire under the "Crucible" Blister and tub steel item of the Tariff Schedule: the cost per ton was Rs. 225 C.I.F. The Metallurgical Inspector reported to Messrs. Halley Brothers that the material was most probably of basic open hearth steel and not crucible steel and that the samples submitted were steel rod and not wire properly so called.

No appeal in this case was made to the Collector of Customs.

Paragraph 44, page 130, of the Tariff Board Report shows that the Tariff Board clearly intended wire made of steel for springs should be assessed to the specific rate of duty as wire.

The appeal was dismissed accordingly.

The question raised by the Metallurgical Inspector's note on the wire submitted by Halley Brothers and also by the appeal of Banerjee Brothers, is whether the Tariff Board intended that wire produced by rod mill such as the Belgian (Looping Mill), Garret, Bedson, Morgan, and Combination, shall be assessed at the specific rate in addition to wire produced by the process of wire drawing.

In the absence of orders to the contrary we have taken duty at the specific rate for all wire whether produced by rod mills or by drawing.

In actual practice rod mills produce wire down to No. 7 or 0·176 inch diameter, and for the wire drawing process, rods from the rod mill are taken at No. 5 gauge (0·12 inch) to No. 8 gauge (0·160 inch) and after picking in dilute Sulphuric or Hydro-chloric acid to remove scale, and washing in lime water to remove the acid, the rod is reduced by being pulled through dies.

As regards wire imported in cut lengths for re-manufacture into such articles as gill pins, we are assessing at the specific rate.

Certain British Exporters substituted the word " Best " in their invoice for " Ordinary " in order to escape the higher tariff rate for " Crown and superior qualities."

A sample of the hoop was forwarded to the Metallurgical Inspector, Jamshedpur, together with a known Crown Quality, and he confirmed the Calcutta Custom House test that the hoop in dispute was as good a quality as the " Crown " sample.

Several thousand tons of hoops were involved in this decision.

Appeals made by Messrs. K. Paul and others on Mild Steel Hoops, ½″ c 24 BWG, from the continent.

The tensile strength shown by the Brinell hardness test was, in each case, 36 tons or above apart from the definitely smooth surface, and therefore classification might have been made under either of the Tariff valuation yielding the most duty.

Ruled to be assessable as sheets which have been cold rolled and pickled or cleaned—Central Board's No. 3277 of 26th July 1924.

Misconstruction has been given to the item of the Tariff Schedule covering sheets which have been cleaned or smoothed. At some ports the process of close annealing only has been taken to exclude sheets from the specific rate, whereas this process also occurs with hot rolled black sheets dutiable at Rs. 30 per ton. An attempt has been made to make the item of the tariff clearer in the 1925 Schedule.

The tariff rated sheets are recognizable by their smooth surface which is still visible even after the sheets have been subjected to second annealing and annealing for colour, which are operations extraneous to the annealing performed after the process of reducing the sheet bars to sheets: this annealing is always necessary to remove strains and brittleness.

Central Board ruled that such plates should be assessed as special qualities under head firebox and special qualities on a tariff valuation of Rs. 300 per ton.

Letter No. 3850 of 26th August 1924.

The Tariff Schedule for 1925 now shows each item separately.

Sections are ruled to be parts capable of being launched separately.

Dismantled elements of such parts are liable to duty at the proper rate for fabricated steel work—Central Board's Ruling No. 6 of 21st June 1924.

Article 136 of the Tariff Schedule is still ambiguous as regards machinery imported with ships and other vessels in sections.

To be assessed under " all sorts of iron and steel and manufactures thereof not otherwise specified " as they do not satisfy the definition of steel structures because they are not designed to take a load.

Central Board's Ruling No. 6 of 21st June 1924.

On this analogy steel rolling doors and other similar subjects of Tatas appeals are now being assessed under o/s.

These are made of one piece of steel and not built up of fabricated materials.

Central Board's Ruling No. 6 of 1st June 1924.

These poles are of beam section with the web latticed, and appear to overlap fabricated structural sections.

Central Board agrees that the expression " Alloy Steel " means steel which has been mixed with certain elements other than carbon, in order to give it extra strength, hardness and elasticity, such as nickel steel, manganese steel, chrome steel, tungsten steel.

Regarding steel structures of alloy steel the Board wishes to be given actual instances of their uses before issuing a ruling.

Central Board's No. 3961 of 1st September 1924.

Alloy steel is valuable for such structural purposes as the frames of rail or road vehicles, axles, etc.

In the absence of an official definition assessments have been made on the following principles:—

All coal tubs, tipping wagons and like conveyances assessable under Item 142 of the Steel Tariff Amendment shall be of a capacity up to and including 54 cubic feet, but excluding such wagons or conveyances 36 cubic feet and above that are fitted with buffers and couplings for traction by power other than manual or animal.

The reasons for such differentiation are based on the undernoted particulars:—

> A light railway track is considered to be constructed of rails 35 lbs. per yard or less.

Conveyances to be operated by any form of traction other than manual or animal would be fitted with buffers and couplings. The resistance to traction in proportion to the whole weight is $\frac{1}{110}$, on round top rails, for wagons with 12″ wheels, which is the average size for the conveyances under review.

A man can apply a force of 60 lbs. in an emergency or a force of 15 lbs. in continuous work at a velocity of 220 feet per minute.

Coal is equivalent to 40 cubic feet per ton of 2,240 lbs. therefore it takes $20\frac{4}{11}$ lbs. to tractor a ton or roughly it will take two men to effect traction of wagon of coal, 54 cubic feet.

The same size of wagon loaded with ballast would require twice the power, ballast being 20 cubic feet per ton: the latter condition would be approximately single animal rating.

A descriptive booklet showing plates making up cast iron tanks is submitted.

It is assumed that the plates being the products of a foundry, and not a rolling mill they are properly assessable as "Other kinds" at 15 per cent. *ad valorem.*

In this connexion it may be observed that tanks constructed of cast iron plates compete with those made from the rolled products.

It is for consideration whether this item shall now be deleted from the Tariff Schedule in view of the withdrawal of other concessions to the Tea Industry.

Other ports have experienced difficulty in classifying these items when they have been of merchantable sizes.

It is desirable that a limit should be fixed for guidance.

As regards bar cuttings, they are usually rolled into lighter sections at the rolling mill. If exported it is to be assumed that they are merchantable as bar.

Similarly if it can be shown that sheet cuttings have a use in local manufactures such as steel trunks, almirahs and shelving, it is for consideration whether they should not be classified as sheets.

(2) *Letter from the Collector of Customs, Calcutta, No. 8700, dated 13th September 1926.*

I enclose a statement showing imports of charcoal and coke tinplates for the months of February, March and April 1926. The charcoal tinplates are used mostly by jute mills for making "Jockey cylinders," which are the rollers from which spindles are driven. A small quantity is also used for the fruit canning industry in which a specially thick coating of tin is required to resist the acid contents.

Coke plates, apart from those imported by the Oil companies are used for making canisters for biscuits, ghee, etc. One or two small items of high value (Rs. 700 to Rs. 1,000 per ton) were imported by the jute mills and consisted of out sizes, 72″ by 36″ and 90″ by 36″.

Coke Tinplates.

	FOR OIL COMPANY.					OTHER SORTS.				
	Quantity.		Value.			Quantity.		Value.		
	Tons.	Cwts.	Rs.	A.	P.	Tons.	Cwts.	Rs.	A.	P.
	745	19	3,05,152	0	0	258	15	80,551	0	0
	258	13	1,05,056	0	0	185	1	57,345	0	0
	453	12	1,52,697	0	0	48	8	15,894	9	0
TOTAL .	1,458	4	5,62,905	0	0	492	4	1,53,790	9	0

Charcoal Plates.

Months.	Quantity.		Value.		
	Tons.	Cwts.	Rs.	A.	P.
February	14	7	6,721	0	0
March	12	14	4,924	0	0
April	28	8	12,965	0	0
TOTAL .	55	9	24,610	0	0

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COLLECTOR OF CUSTOMS, CALCUTTA.

B.—Oral.

Evidence of Mr. G. S. HARDY, I.C.S., recorded at Calcutta on Tuesday, the 17th August, 1926.

President.—You are the Collector of Customs, Calcutta.

Mr. Hardy.—Yes.

President.—We are considering a proposal whether it might be possible to put on two different kinds of duties, one on steel which comes from countries such as Great Britain where there is stabilised exchanged and another from countries where the exchange has depreciated and is constantly depreciating. I should like to know whether there would be any administrative difficulties in administering a tariff like that.

Mr. Hardy.—I am given to understand that unless you differentiate merely between British and other foreign steel you will be up against diplomatic difficulties. If you are going to differentiate at all, you will have to take "most-favoured-nation" agreements into consideration.

President.—That is a point we will have to consider, but it has really to do more with the Government of India than ourselves.

Mr. Hardy.—It means that you will have to include America.

President.—At present the competition from America does not really count for practical purposes.

Mr. Hardy.—Then I think that there would be no difficulty provided the onus of proving that the steel is entitled to come in at a lower rate is placed on the importer. I believe there is a precedent for this. It only occurred to me yesterday and I have not been able to get hold of the papers. Some years ago before the war there was a somewhat similar set of rules to apply under certain circumstances to bounty fed sugar. We have got a precedent there which might possibly form a basis for discussion as to the method to be applied.

President.—I think that it would be very useful if you could let us have those papers.

Mr. Hardy.—I don't know whether they can be traced in my office. I was not able to get hold of them before I came here to-day.

Mr. Mathias.—Would there be any difficulty on account of the countries with a depreciated currency exporting through countries without a depreciated currency such as Germany?

Mr. Hardy.—There would be difficulties if you are going to differentiate between, say, Belgium and Germany, but I don't think that there would be any serious difficulty if you differentiate merely between England and the Continent. Otherwise I think there would be. We can get certificates of origin from the United Kingdom on which we could rely, but I don't see how we can rely on certificates of origin either from Belgium or Germany.

President.—If Germany was excluded the scheme might fail to a very large extent.

Mr. Hardy.—I think so. I think that you would have to include Germany.

President.—What form do you think that the tariff should take? What do you say to this—Rs. 20, for the sake of argument, a ton on all steel and Rs. 20 extra on steel coming from countries which we will have to mention?

Mr. Hardy.—I would rather see it done as it is done now with certain concessions, that is, Rs. 40 a ton on all steel and a concession—possibly not embodied in the Tariff Act at all—made by notification in favour of steel proved to be imported from the United Kingdom.

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President.—That might lead to more complications.

Mr. Hardy.—It will at once put the onus of proof on the importer to show that he is entitled to get the concession.

President.—Say Rs. 20 on all steel.

Mr. Hardy.—I should suggest a duty of Rs. 40 on all steel and a rebate of Rs. 20 on steel shewn to have come from the United Kingdom.

President.—Or you can do it this way—Rs. 20 on British steel and Rs. 40 on Continental steel.

Mr. Hardy.—You could do it that way.

President.—That would relieve you from the necessity of giving a rebate.

Mr. Hardy.—We should in any case charge the lower rate of duty at the time of import if the claim thereto were proved. For instance in the case of tin Government have reduced the duty not in the Tariff Schedule but by a notification.

Mr. Mathias.—Would there be any advantage in the method you suggest? The onus of proof is the same in both the methods.

Mr. Hardy.—No, it is not. If you merely say Rs. 20 on this country and Rs. 40 on that, the presumption is raised that the stuff originated in the country from which it was shipped.

Mr. Mathias.—So that you would be throwing the onus of proof on the importer if you put it in the form of exemption from a certain amount of duty.

Mr. Hardy.—Yes.

Dr. Matthai.—Suppose we went further and suggested that a lower duty should be levied where a certain percentage of the value is contributed by British material or British workmanship, would it be administratively difficult?

Mr. Hardy.—It would be a little more difficult. Are you contemplating the manufacture of steel in the United Kingdom from foreign pig iron?

Dr. Matthai.—Or foreign semi-finished material.

Mr. Hardy.—I think that we would probably be able to get hold of satisfactory certificates because such certificates are already furnished for purposes of anti-dumping legislation and preferential tariffs in all the Dominions.

Dr. Matthai.—Who does the certifying?

Mr. Hardy.—I think that the exporter has to sign a declaration and the Dominions take different steps to check it. I have not seen the papers for a long time. I attended the Imperial Customs Conference in 1921 in which the first item on the agenda was to unify the different certificates which the various Dominions required. They differed in the matter of details. One allowed, say, 40 per cent. of foreign labour and another allowed 30 per cent. Some of them included in labour certain costs like land transport, others did not and so on. The object of the conference was to get them all on the same basis, so that the manufacturer, in shipping his goods to any part of the Empire, might make out the same form of certificate.

Dr. Matthai.—What is the normal procedure? The exporter gives a declaration and the declaration is checked by somebody else.

Mr. Hardy.—I believe that in the case of some Dominions it has to be countersigned by the High Commissioner or somebody working in the office of the High Commissioner, but I don't think that applies to all. We could find it out from the British Trade Commissioner. I think that he will probably have information as to the forms of certificates. I can ask him for it if you like.

Mr. Mather.—I think that in certain cases the High Commissioner of the Dominion in question occasionally sends his officers to inspect the works issuing the certificates.

Mr. Hardy.—At the time I attended that conference, New Zealand had a special representative in England to do that and nothing else. He attended that conference.

Dr. Matthai.—I have seen a lot of complaint about the working of the provision regarding a fixed percentage in Canada. It is very difficult to carry that out apparently.

President.—It may not be necessary from our point of view to go to the same extent into that question.

Mr. Hardy.—I don't think it would.

President.—Even supposing Great Britain imports semi-finished steel and carries the manufacture further, so long as steel in the United Kingdom is sold at a rate considerably higher than on the Continent . . . .

Mr. Hardy.—You have in mind the case of fabricated steel? I don't think that would cause serious difficulty.

President.—When the question arises of Imperial Preference in the Dominions where they want to protect British material and British labour as such, then, of course, it is very important from their point of view that a substantial portion of both should be of British origin. In a case like this where we are trying simply to stabilise prices as far as possible with reference to the country with a stabilised exchange and so long as its products are sold at a price which is higher than the price in the Continental countries, the question might not arise in that form.

Mr. Mathias.—As regards fabricated steel, would your suggestion be that the onus of proof on the importer would prevent an evasion of that character?

Mr. Hardy.—The real safeguard against an evasion of that kind is that if anybody is exporting from the United Kingdom at unduly cheap rates in competition with other people, the latter will get to know about it.

Mr. Mathias.—You think that they would represent the matter to Government?

Mr. Hardy.—It is in the general interest of the iron and steel trade. They all want to push their own products. They soon get to know if somebody is under-quoting them.

Mr. Mathias.—And they would bring the matter to the notice of the Customs authorities?

Mr. Hardy.—They might represent to us here or to somebody at home.

Mr. Mathias.—The stuff may come in under a false certificate.

Mr. Hardy.—It is always in our power to ask for proof that a document is genuine. We may require further evidence.

President.—You have to ask for a declaration as to the country of origin.

Mr. Hardy.—Not at present.

President.—Is there no case in which you have got to do that?

Mr. Hardy.—No. Throughout the war, practically everything had to produce a certificate of origin, but that was purely in connection with war trading restrictions. That has been entirely stopped now.

President.—Did you find many cases of fraud in the declaration?

Mr. Hardy.—We didn't detect very many. They were coming from all over the world and it was practically impossible to check the genuineness of them.

Mr. Mather.—You told us that before the war the question of differentiation was raised in connection with sugar. Do you remember whether that was generally considered to operate satisfactorily?

Mr. Hardy.—It was long before I joined the Customs Department—at least 20 years before.

President.—One thing has got to be guarded against in any such scheme from our point of view and that is the possibility of the re-export of Continental material from Great Britain.

Mr. Hardy.—I don't think that there is any serious danger of that. With the same system of certification as the Dominions use I don't think that there should be any danger.

Mr. Mathias.—Do you think that the system of certification would be necessary?

Mr. Hardy.—I think so. If prices were low we should at once begin to question the genuineness of the certificates and make further enquiries.

President.—First of all, the gap between the two prices must be very wide in order to make the fraud worthwhile.

Mr. Hardy.—Yes.

President.—Secondly, it would involve not only a false declaration but also false invoices, false banking documents and many other things to carry the fraud right through.

Mr. Hardy.—Yes.

Mr. Mathias.—Is there much fabricated steel imported from the Continent?

Mr. Hardy.—I don't think that there is very much. As a matter of fact, I have not looked up the figures.

Mr. Mathias.—It is mostly British specification?

Mr. Hardy.—I think so.

Mr. Mathias.—As matters stand, the question of fabricated steel is not of much importance.

Mr. Hardy.—Not as it stands at present.

President.—What is your experience, generally speaking, as to these declarations? Do you find them on the whole honest?

Mr. Hardy.—Yes. We have occasional fraudulent cases, mostly from Central Europe. There are cases which come across where we have suspicion but it is often difficult to try and bring it home. Of course in the long run our last resort is section 32 of the Sea Customs Act which enables us to take the goods over.

President.—If it is under-valued?

Mr. Hardy.—Yes.

President.—Do you use that provision often?

Mr. Hardy.—We are using it oftener than we used to, but mainly in connection with piece-goods and we find that it works very well because when we find that we can sell a thing at a substantial profit then we argue from that the declaration and the under-valuation is deliberate and the man can be fined.

President.—Can you put a penalty when you take the goods over?

Mr. Hardy.—We can. I think there is a High Court ruling on the point.

Mr. Mathias.—After you confiscate the goods you sell them in the country?

Mr. Hardy.—We do not confiscate them, we "pre-empt" them.

Mr. Mathias.—They come in actual competition with Indian goods?

Mr. Hardy.—I do not remember having "pre-empted" any goods dutiable under the protective tariff. We get these frauds more in glassware, cards, china silk and things of that sort. I do not remember any case of goods under protective duty.

President.—Another point arises. In our last scheme we recommended, and the Government of India accepted the recommendation, that if for any reason protection became ineffective they could make it effective by the imposition of an additional duty. That section was intended to be used in the executive department of the Government of India. As it happened the Government of India ordered an enquiry by this Board and after the Board had made enquiries and reported they took action. Supposing it was possible for the Government of India without any great formal enquiry to take action under such a section, it would be merely an enquiry into the question of prices. Supposing this duty were put in another form:—a permanent duty which is to remain in force during the period of protection and another duty, which may be called the off-setting duty or an anti-dumping or additional duty, which is to remain in force so long as prices remain substantially below the fair selling price that we determine, but may be removed or added to if prices come down or go up as the case may be, in such a case do you think, so far as the Customs authorities are concerned, there will be any difficulty?

Mr. Hardy.—No, but we might have complaints from people who have stuff already on the way, and I do not know whether you would be able to apply the provisions of section 10 of the Tariff Act in that case.

President.—That might apply.

Mr. Hardy.—It might not if you alter the duty merely by notification.

President.—They will have to go into that in the Legislative Department, but I think that difficulty can be got over.

Mr. Hardy.—Hitherto they have only reduced the duties in that way when you decided they were unnecessarily heavy.

President.—That happens practically every year. In some cases the Finance Member increases the duties under the revenue tariff and I think it would not involve any greater hardship than that if it were done frequently, would it?

Mr. Hardy.—Provided section 10 of the Tariff Act applies.

President.—The only thing of course is that when an industry is protected and the people come to know that there might be a change of tariffs either way, then there is a little cessation of business. People won't import or if they know that the duty is going to be increased they may import too much.

Mr. Hardy.—I am not in a position to speak on behalf of the Government of India, but I think they might be a little shy of section 10 after their experience in the case of the salt duties. Importers complained that on "budget" day they had sold largely for cash before they knew the duties had been raised. Later in the month the Assembly restored them to their old level, and we have to refund large sums to the importers which were clear profit to them, since for nearly a month they had been delivering for cash at the higher rate.

President.—That is an element of risk that is attached to practically all tariffs.

Dr. Matthai.—There is this difference, that where it is simply a variation in the revenue duty at the time of the budget the variations are not likely to be so considerable as variations in protective duties on account of fluctuations in world prices.

Mr. Hardy.—In the case of salt and matches the duty was doubled.

Dr. Matthai.—I was thinking of it this way. Supposing as an importer I order goods sometime in October, say fabricated steel sheets. Generally it takes six months to arrive after I order them. In the meantime the prices fall and on a review of these fluctuations Government decide, say sometime in February, to raise the duty, then in that case it would affect me as a trader, would it not?

Mr. Hardy.—You might have contracted to pay for the steel at a higher price already, that is what you mean?

Dr. Matthai.—At the time I contracted, the duties were lower. It is unfair, is it not?

President.—If the purchaser knows that the tariff is likely to vary and the seller also knows, then has either of them any reason to complain?

Mr. Hardy.—It would in effect be an indirect form of protection because it would make the purchaser chary of ordering steel from Continental countries owing to his uncertainty as to what the duty will be and the effect would be to keep orders away from those countries. That in itself would be a safeguard.

Mr. Mathias.—The Steel Industry (Protection) Act contains a section empowering the Governor-General to vary the duties, does it not?

Mr. Hardy.—It does.

Mr. Mathias.—Which so far has not had any great effect on the operations of dealers.

Mr. Hardy.—No. I don't think they have used that provision.

Mr. Mathias.—It cannot be used for reduction of duties. It can only be used for increasing the duties.

Mr. Hardy.—You can reduce the duties by notification under the Sea Customs Act.

Mr. Mathias.—In fact the position is that, if any provision of the kind suggested was introduced, dealers would continue to import as before.

Mr. Hardy.—Yes, probably.

President.—Is your department in touch with the market as regards c.i.f. prices?

Mr. Hardy.—We see the invoices of every consignment that comes in.

President.—Do you keep a record or do you get your prices from local importers?

Mr. Hardy.—If we want to see the price at a particular time we can look up particular importations at that time. The importer has to declare the "real value" for statistical purposes, even when the duty is specific or levied on a tariff valuation.

President.—We have found it more or less safe to obtain our prices from a certain number of importers. They furnish us with prices every month, so we know at what price steel is coming in. I suppose if the Board did not exist you would have to collect the information for the Government of India. Would there be any objection to your doing the same thing?

Mr. Hardy.—I think that point has been put in your questions in the first enquiry.

President.—The declared value is not very good evidence of the actual price at the time, is it?

Mr. Hardy.—Not always. It is often merely the price actually paid.

President.—For that reason it would not be worth while spending more money on devising machinery to get the declared value, if you get the prices from the various dealers, the c.i.f. prices of importation, regularly. They import the goods on commission and they simply quote the c.i.f. price *plus* their commission in very many cases, so that is the actual price at which steel in entering the country at that particular moment. That is really what is required.

Mr. Hardy.—We can get that for any date you like.

President.—It is immaterial from our point of view when the goods were ordered. The point is, at what rate the goods actually enter the country at a particular stage.

Mr. Hardy.—The only additional work that will be involved will be that the appraiser will have to go into more intimate details as to the exact kind of goods and the quality of the article. For steel bars, for instance, we could not quote the exact rate: there may be different prices for different qualities.

President.—You have three or four different ways in which you can check it. Firstly, you can take the trade journal figures which are fairly reliable, then the invoices and then the information that you get from the importers. Then you have got the actual bazar prices so that the chances of there being much fraud are very few and the Government of India can take action if it liked on the information collected by the Collector of Customs.

Mr. Hardy.—Yes.

Dr. Matthai.—Would it mean considerable addition to the work of your department?

Mr. Hardy.—Very little addition.

Mr. Mathias.—Would there be any difficulty in the Customs Department ascertaining the average price for one year of imported common merchant bar?

Mr. Hardy.—I can get that for you.

Mr. Mathias.—Would there be any difficulty in getting the weighted average?

Mr. Hardy.—I can get that too.

President.—It may purely become mechanical and the Collectors of Customs mainly concerned would be those of Calcutta and Bombay.

Mr. Hardy.—That is so.

President.—You can by simply changing the tariff valuation make a substantial difference in the incidence of the duty?

Mr. Hardy.—If there is a big fall or a big rise in price then the incidence is affected.

President.—In the *ad valorem* duty it works rather in a peculiar way. If they vary the tariff valuation simply there may be a big variation in the incidence of the duty. That happens every year. I think the case of sugar was one.

Mr. Hardy.—That was a very striking case. The tariff valuation for 1920 for white sugar was about Rs. 18-8-0 and the price went up to Rs. 60. In the following year the price was down to Rs. 15, but the tariff valuation was fixed at Rs. 32-4-0. In fact Government was in the fortunate position that when a specific duty was put on equivalent to 25 per cent. on the then tariff valuation of Rs. 18, the actual price had dropped to about Rs. 12.

Dr. Matthai.—How often is the tariff valuation revised?

Mr. Hardy.—Regularly once a year from January 1st. Sometimes intermediate revisions are made in respect of special items, but not often.

President.—In a scheme like this, supposing it was a ten years scheme, just as you revise your tariff valuation on other articles you simply revise this and in the ten years time more or less the position may be equalised. Is there any difficulty about that?

Mr. Hardy.—No.

President.—It seems to me you have actually got here a system which may lead to variation in the incidence of the duty from year to year, and such a system as we are discussing now would not be a serious departure from the system that you have in existence.

Mr. Hardy.—No. At present one of the excuses for revising valuations without notice is that the importer is in a position to follow the trend of prices and himself to forecast what the revaluations are likely to be, and he could do the same thing in the case of your proposal.

Dr. Matthai.—It is a fact that Government are rather chary of altering tariff variations too often. Take a thing like spelter, I think there were very considerable variations in the past two or three years though the tariff valuation remained the same.

Mr. Hardy.—There appears to have been no change in the valuation of zinc for two or three years. But if you compare schedules for successive years you will notice a very large number of items in which changes are made. There is no reluctance on the part of Government to make annual changes.

Mr. Mathias.—Could you give me any information as to the machinery of the tariff variation? Was it automatic?

Mr. Hardy.—It used to be automatic in the case of sugar before the specific duty was imposed but for everything else the procedure is as follows:

A conference of Head Appraisers is held sometime about the beginning of October. The Director-General of Commercial Intelligence presides over them and they agree on provisional rates. The Director-General goes round and discusses the rates with the Chambers of Commerce and Collectors of Customs and after consulting all these people, he puts the proposals before the Government of India, and they are put into force from January 1st.

Mr. Mathias.—Are there any instructions issued as to the principle on which these variations should be made?

Mr. Hardy.—Roughly they are supposed to be mainly based on the average price of the year which has come to an end.

Mr. Mather.—The average selling price in the local market?

Mr. Hardy.—The average value on which they would be assessed, *i.e.*, the wholesale market value less duty or the c.i.f. value.

Mr. Mathias.—Are there any instructions about frequent changes?

Mr. Hardy.—I don't think there is any need for instructions. The Government of India issue the schedule themselves. They also occasionally take into account the trend of prices.

Mr. Mathias.—You will probably draw attention to the matter in making recommendations.

Mr. Hardy.—Yes.

Mr. Mathias.—Take the last three or four years. Have there been any considerable or frequent variations?

Mr. Hardy.—In a lot of items there have been changes.

Mr. Mathias.—And those I take it are generally acceptable to the commercial community.

Mr. Hardy.—Yes. The Chambers of Commerce very rarely complain of the proposed rates. There are often only half a dozen items which are discussed when the Director General meets them.

President.—They would pretty nearly know what the next tariff is going to be.

Mr. Hardy.—They would. Any merchant who keeps an eye on the market can tell. If he knows that the prices have been up he will expect the tariff valuation to go up. Mostly they are small variations—5 to 10 per cent.

Mr. Mathias.—In fact can it be said that the general agreement of the merchants is due to the fact that the variation is annual and is expected by any one who follows the course of prices. If any such variation is introduced at irregular intervals, there would be great objection.

Mr. Hardy.—I think so. I can only remember one case where the tariff valuation was altered during the year when it was found that it had been fixed so high as to cause a real hardship. The Government of India have occasionally reduced the tariff valuations in between times but it happens very very rarely.

Mr. Mather.—But generally the operation of the revaluation for the Tariff Schedule has not given rise to any substantial hardship?

Mr. Hardy.—We have had very few complaints.

President.—In a special tariff such as that we are discussing it may be that the variation may be somewhat sudden. If it depends on exchange for instance or some big European strike which affects all prices for the time being, in such a case prompt action may be taken and the variation may be considerable.

Mr. Hardy.—Yes. That would not arise in the tariff valuation, because you would ordinarily interfere at the end of the year. It would moreover be several months before any sudden drop would affect the prices of the stuff here. Practically all European goods are sold on a sterling basis, and as often as not the contract is entered into at least 3 months before the goods arrive.

Mr. Mathias.—Do you think that in regard to the period it takes to obtain things from Europe, there is likely to be any difference between steel and other commodities? Do you know whether orders for steel get placed further ahead than the orders for other commodities?

Mr. Hardy.—I don't think so. It depends on the nature of the steel. If it is merchantable steel, it might be imported direct from stock.

Mr. Mather.—It depends on the general conditions of the trade?

Mr. Hardy.—Yes. I should not think that the forward business in steel is arranged further ahead than in piece goods.

Mr. Mathias.—With regard to the tariff valuation if there was a sudden drop in the price of any commodity in the last three months of the year, in fixing the tariff valuation, would you make any reduction or would you say that this is a temporary matter?

Mr. Hardy.—I think that is the point which Mr. Ginwala made just now. If there was a change in the price in the last 2½ months of the year, probably it would not be in the original provisional schedule. It might come soon enough to be raised for discussion with the Chamber and would thus affect the decision, and the proposed rate might be reduced. Or it might come along later and the Government of India might still alter the rate before the 1st of January.

President.—Would you adopt the average of the year?

Mr. Hardy.—We would take the average unless there was some special reason for believing that the drop was due to a cause which was likely to be permanent.

President.—The Government of India really get two opportunities. First of all when your revised tariff valuation goes up, they have got to sanction it.

Mr. Hardy.—Yes.

President.—And secondly when the Finance Bill comes up for discussion, they get another opportunity of revising it.

Mr. Hardy.—They don't, as a rule, alter the tariff valuation then.

President.—If discussion is raised, as a result of the discussion they might alter the rate of duty, but not the tariff valuation.

Mr. Hardy.—I have not known of their altering a tariff valuation as a result of discussion in the legislature.

President.—They get an opportunity of revising it, if they choose to do so.

Mr. Hardy.—They may get criticisms of it.

President.—Ordinarily I take it the tariff valuations are not revised within the year.

Mr. Hardy.—No.

President.—I want to ask you a few questions about classification and certificates. We wanted to find out what sort of tinplates were imported into the country to consider whether India could manufacture these different classes of tinplates. We have not been able to get any information so far.

Mr. Hardy.—No. We can always record any particular type of information you want. We can arrange for that.

President.—In that case the gauge would be the thing. I think in the case of sheets, both plain and galvanised, there would be some difficulty.

Mr. Hardy.—If the Board could go through all these protective duties and make out a detailed list of items regarding which they require statistical information, we can always arrange to collect it.

President.—It is rather an important thing for the industry to know exactly what sort of a market it has and tinplates and sheets were typical cases.

Mr. Hardy.—Most of the subdivisions in our statistical calculations have grown up from particular enquiries made at different times. Possibly many of them have ceased to be of interest many years ago, but we are always ready to add to them if necessary.

President.—At present you cannot give us any informations to the kind of tinplate that comes by gauges or weight or anything like that.

Mr. Hardy.—We could probably get it out for you. I am not certain of that. We might find the weights recorded on the bills of entry.

Mr. Mather.—We have received a request that the tinplate which is generally known as 70-lb. tinplates should be differentiated for duty purposes from the present all round duty. We have no information to show how much of that material is brought into the country.

Mr. Hardy.—We can often dig out figures from our old records in Calcutta, but they can't do it in Bombay, as a rule, since they have there mechanical compilers which are not adapted to that particular purpose.

Mr. Mathias.—Could you differentiate between coke tinplates and charcoal tinplates?

Mr. Hardy.—I should not think so.

Mr. Mathias.—There is a distinction in appearance.

Mr. Hardy.—We can make a distinction if you want us to do in future. We cannot get it from our past records.

President.—The point arose in connection with charcoal and coke plates. You might be able to distinguish with a fair degree of certainty, if the charcoal plate was of first class quality. If it was inferior charcoal and a lower duty was put on that, it might be used in place of coke tinplate.

Mr. Mathias.—It could not be distinguished unless there was chemical examination.

Mr. Mather.—It would only be necessary to ascertain the percentage of tin.

Mr. Hardy.—We could do that.

President.—It is difficult to fix what the percentage of tin ought to be in the charcoal plate. We can fix the maximum, but we don't know how far we can reduce it.

Mr. Mather.—The difficulty would not be serious.

Dr. Matthai.—There is no real reason why there should be any difference between the way you make up the trade returns and the way you make up the tariff schedule.

Mr. Hardy.—I am afraid there is.

Dr. Matthai.—What precisely is the reason?

Mr. Hardy.—They are designed to meet entirely different purposes.

Dr. Matthai.—You don't pick out the things that bear separate duties and show them separately. They are lumped together.

Mr. Hardy.—It would be possible to make arrangements by which you could get all the detail in one embodied in the other.

Dr. Matthai.—You could prepare them in such a way as to serve both the special interest and the tariff interest.

Mr. Hardy.—Yes, but it would be fairly long job for somebody to go through. It would probably mean some one on special duty in the statistical department.

Dr. Matthai.—If one tries to estimate the revenue from a particular duty, it is extraordinarily difficult to get it as the trade returns stand at present.

Mr. Hardy.—We had that difficulty over paper.

Dr. Matthai.—It would only mean revising the entries that would come in under the protective scheme. A great number of these things don't come within the protective scheme. Therefore there won't be any considerable recasting of the returns required.

Mr. Hardy.—We have been adding a lot of additional items.

Dr. Matthai.—Take a thing like fabricated steel. It appears in six different places in the trade returns.

Mr. Hardy.—That is true.

Dr. Matthai.—Do you remember the last item "other manufactures" under steel? Would there be any fabricated steel in that?

Mr. Hardy.—I don't think we have a special entry for hardware. Hardware may include a lot of fabricated steel and there is a great deal of miscellaneous hardware coming in.

Dr. Matthai.—Some of them would be fabricated.

Mr. Hardy.—I should think all would be fabricated.

Dr. Matthai.—Is there any sort of rule of thumb that you apply with regard to fabricated steel?

Mr. Hardy.—Generally, if a thing is put through any other process after coming out of a rolling mill, we call it fabricated.

सत्यमेव जयते

Oral evidence of Mr. W. W. NIND, Collector of Customs, Calcutta, and Mr. C. W. CLEMENT, Officiating Second Appraiser, Calcutta, recorded at Calcutta on Friday the 12th November, 1926.

Administration of the Import Duties.

President.—I think that it would be better to keep a full record of to-day's proceedings. They will be treated as confidential until the report is released but if there are any matters which you don't wish to be published, you can draw our attention to them when you correct the evidence. We should like you to express your opinion freely on any point that may arise.

Have you read the draft chapter that we sent you?

Mr. Nind.—Yes, I have.

President.—In the system that we are recommending, there will be two sets of duties, *viz.*, a basic duty which will be imposed on all steel including British steel and an additional duty which will be imposed only on non-British steel. That is a point which you should bear in mind in giving evidence. We are not proposing two sets of duties entirely independent of each other, that is to say we are not proposing one set of duty on British steel alone and another set of duty on non-British steel. We are putting one basic duty on all steel including British steel and an additional duty on non-British steel. Before going into the detailed proposals, I should like to ask you a few questions about the administrative part of the scheme with a view to ascertain whether you anticipate any difficulties in the administration of such a system. The main thing would be to find out the country of origin.

Mr. Clement.—The country of origin would be indicated by the port from which the consignment of steel has come. That is the only guide, for it would be very difficult to find out the country of origin of the steel itself.

President.—The Customs authorities should satisfy themselves as to the country of origin.

Mr. Clement.—The invoice may be supplemented by a certificate from the manufacturers. But the difficulty is that the invoices are not manufacturers' invoices. Further, invoices even for Continental steel emanate from London.

President.—*Prima facie* if steel were shipped from a British port, it would mean that it was British steel. Of course it might be Continental steel re-exported. But ordinarily speaking it would be British steel. When you have any suspicion, you will require further proof.

Mr. Clement.—It is not so easy as that. It is just possible that a boat which touched at Antwerp might go to Middlesborough and there might be transhipment or reshipment on to another ship of the Company's line. This is complicated by the fact that the invoices which we see come from a London firm.

President.—What do you suggest to get over the difficulty?

Mr. Clement.—The only way to get over that difficulty would be to treat all steel on the top rate and let the importer prove by a certificate from the manufacturers that it was actually British steel.

Dr. Matthai.—And give British steel a rebate?

Mr. Nind.—We are not suggesting any alteration in the tariff at all. If any steel comes in, we should, in the absence of any special certificate, treat it as Continental steel and put the onus on the importer to prove that it was not.

President.—In the absence of proof to the contrary all steel will be regarded as of Continental origin.

Mr. Nind.—Yes.

President.—If you say that all steel shall be regarded as of non-British origin, until the contrary is proved, the Governor General can take power to make rules to determine the country of origin and change them from time to time as circumstances require.

Mr. Nind.—Broadly speaking, that will be the way in which it will have to be worked.

President.—If Government found that finished steel of Continental origin was being more or less reshipped and that very little rolling was done in Great Britain, then it can provide by rules again that all the processes of rolling shall be carried out in Great Britain and proof given of that fact.

Mr. Clement.—In the case of sheet bar and items of similar nature, the entire form will be changed.

Mr. Mather.—Sheet bar is not going to be protected; so we are not concerned with that.

President.—Take the case of black sheet. It may be taken from the Continent and then it can be galvanized and corrugated because the difference in cost between black sheet and galvanized sheet is considerable and the Continental black sheet is cheaper. In order to avoid that, the Governor General in Council may prescribe that all the processes including those of rolling and finishing shall be performed in Great Britain. In that case, it would be quite safe, would it not?

Mr. Clement.—Yes.

President.—And there should not be much difficulty in proving that fact.

Mr. Clement.—It can be done by a certificate. As I say, we don't see the actual manufacturers' invoices in 80 per cent. of the cases.

President.—In that case it should be essential that there should be the manufacturers' certificate.

Mr. Clement.—Yes, otherwise we should never be safe.

President.—That will have to be countersigned by somebody in Great Britain on our behalf.

Mr. Clement.—It can be done by the Trade Commissioner for India. It is the same as Consular invoices.

Mr. Mather.—When Mr. Hardy was examined two months ago, he said that he did not anticipate any particular difficulty, although clearly it would mean some modification in the matter of procedure.

Mr. Clement.—It is not an extraordinary request to make that invoices should be signed by some authority.

Dr. Matthai.—If you ask somebody like the Trade Commissioner or the High Commissioner to do that job, do you think that it would add enormously to the amount of work in his department.

Mr. Clement.—He will receive fees for doing the job.

Dr. Matthai.—It would mean organising a staff to perform the duty.

Mr. Clement.—Yes.

Mr. Mathias.—Would it require a staff of experts?

Mr. Clement.—Not necessarily. But he will have the machinery to trace back to see whether the declaration is genuine or otherwise.

Mr. Nind.—It comes to this that we should want something of the kind and it would be for the Government to set up the machinery.

Mr. Mathias.—Could you tell us what would be the fee usually charged for that?

Mr. Clement.—Half a guinea to a guniea. It would be something sufficient to cover the additional establishment.

President.—Would it be the same sort of fee as the Metallurgical Inspector charges for his certificate at Jamshedpur?

Mr. Clement.—Yes.

Dr. Matthai.—Is there any article now imported into the country with regard to which you have to ascertain whether the thing originated in the United Kingdom or not?

Mr. Nind.—None.

President.—I think that it may be advisable for you to suggest the lines on which the rules may be made. What we should probably do is to suggest to the Government of India that the Governor General in Council should take powers to make rules in order to prescribe the kind of proof that would be required.

Mr. Nind.—All that we can say is that we should have to depend on documentary evidence and steps would have to be taken to ensure as far as possible that these documents are genuine. That can only be done at the other end.

President. -That is being done practically for all the dominions just now.

Mr. Clement.—Quite. It is only a new suggestion for India. It is not a new suggestion with regard to other countries.

President.—I think that in Great Britain under the safeguarding duties it is also done.

Mr. Clement.—Quite.

Mr. Mather.—It also is done by many countries outside the British Empire. It is a common arrangement.

Mr. Nind.—It would not represent anything of a problem to the authorities in London. The Indian Trade Commissioner would have to get into touch with the Board of Trade.

President.—The manufacturers themselves would be on the look out for frauds and report cases because they would be interested in seeing that fraud was not committed.

Mr. Nind.—Yes. We would have to accept the documents here and it would be for some authority in London to see that the documents are genuine, as far as possible.

President.—If a dispute arises between yourself and the importer, do you release the goods on his giving you an indemnity bond, so that the goods may not be unnecessarily detained?

Mr. Nind.—We have a procedure by which we release the goods assessing them at a provisional duty.

President.—In a case like this, what would happen if there is any serious dispute between you and the importer? Will he have to pay the higher duty?

Mr. Nind.—That is the line we should take. We should charge him a higher duty and undertake to pay him back if he proved to our satisfaction.

President.—You can follow more or less the same procedure in this case.

Mr. Nind.—Yes. I don't think that there would be any difficulty.

President.—As a rule steel would be imported by importing firms on a fairly big scale. It is only when small quantities are involved that you may have some difficulty.

Mr. Nind.—As a rule it is a big firm.

Mr. Clement.—We get people coming into the steel business promiscuously.

President.—In that case the quantities involved would probably be small.

Mr. Clement.—Yes, lots of 50 tons. But ordinarily steel is imported by regular traders recognised in the business.

President.—In such cases you may enter into such arrangements with them as may be necessary and release the goods.

Mr. Clement.—Possibly it would be necessary to take some deposit from them.

President.—The only thing is that you should avoid the detention of the goods as far as possible.

Mr. Nind.—Yes.

Rails and fishplates.

President.—Let us now take " Rails, heavy and light: and fish-plates ". Have you any suggestions to make there?

Mr. Clement.—I should suggest that the whole of this heading be lifted bodily and placed under ' Iron or Steel '. There is a tendency, and I have heard of a case, at another port of dogspikes, being claimed as iron. There is always a temptation to claim it as such when there is a big difference in the duties between iron and steel. Moreover, there is no objection to its being bodily lifted and placed under ' Iron or Steel ' as it will do no harm to anybody, particularly fishplates, dogspikes and tiebars—these are the things which I have in mind—and it would not cut any ice, whereas it would make a lot of difference to us.

President.—In other words you mean that this duty should apply to them whether they are made of iron or steel?

Mr. Clement.—Yes. That is what we would like.

President.—There is a difficulty about cast iron sleepers; we do not propose to protect them.

Mr. Clement.—Then take out a separate item for cast iron. You have a main heading " Iron " apart from " Iron or Steel," and there is no harm in putting a heading " Cast Iron "; and incidentally you can include the cast iron plates and all cast iron articles produced in an iron foundry, as distinct from iron produced in a rolling mill, under this heading.

President.—Have you any other suggestions to make under this heading?

Mr. Nind.—None.

Structural sections.

President.—As regards structural sections have you any suggestions to make?

Mr. Clement.—Mr. Lloyd gave an interpretation of his own on this tariff item. We had a case about channels. A structure has been ruled by the Central Board to be an assembly of parts which has to bear a load over and above the weight of the steel itself. The smallest channel rolled, I think, which is considered a structural section, is 3″ × 1½″. We get channels smaller than this. These go into gates which do not carry a load over and above the structural load, and we assess them at 15 per cent. as " other sorts." Mr. Lloyd holds that this is wrong. He considers that up to the comma after ' trough plate ' all these things stand alone, and " piling and other structural sections " are outside of the others named. That is his interpretation.

Mr. Mather.—Would it meet the difficulty if we used the words " Angle and tee . . . . and piling and other sections not otherwise specified "?

Mr. Clement.—That would absolutely cover the whole thing. I may add that Mr. Lloyd was not giving an interpretation from the steel tariff point of view, he was speaking on the English of the thing. I was going to raise a point here, namely that a structure may be a machine or a vehicle and we are limiting the term really to a dead thing like a bridge or a warehouse. From the legal point of view if we were faced with a High Court case we should have to admit that a structure should have a wider meaning and not be restricted to the meaning already given.

Mr. Mather.—I think " Piling and other sections not otherwise specified " is consistent with our intention. We had not realized that you were likely to define " structural " in such a limited way as that. Really what happens is that your definition of " structural " has rather limited our intention.

Mr. Mathias.—Has there been any practical difficulty?

Mr. Clement.—Yes. Cope iron, zed iron and zore bars come in too, and immediately you drop the word 'structural' you get channel for the gates, sash iron and all kinds of odd sections.

Mr. Mathias.—You want to cut out structural altogether?

Mr. Clement.—Yes, out of that item. In passing I might say that 'trough' would include both trough plates which are rolled and trough plates which are pressed.

President—That is the idea.

Bar and rod.

Mr. Clement.—Then as regards the item "Bar and Rod", I had a point about this but it has been set right by the change here in the structural sections because cope iron will now come in under structural. It is a very thin half round iron and it is used for stiffening up a floor and such like, it may be either iron or steel. As a matter of fact large sections we have treated as structurals but smaller sections as bars because they go into vehicles. That is the reason why I was raising the point that machines and vehicles might be considered as structurals. As long as it is clearly defined in the tariff that the protected steel is straight carbon steel and that other kinds of steel will be at the 10 per cent. *ad valorem* rate.

Mr. Mather.—It is for you to say whether this definition would lead to that interpretation: The definition of bars is "Bars and rods of kinds or qualities not specified elsewhere in this schedule . . .". We have put this definition not to confuse it with alloy steel.

We do not want the protective duty to apply to alloy steel. Unless there is any reason to suppose that alloy steel is likely to be interpreted in a way which would defeat our scheme of protection, it is not for us to interfere with that.

Mr. Clement.—Quite.

Mr. Nind.—Arising out of your new definition for bar and rod there is a new entry there—is the point as to whether alloy steel, given just above it, is sufficiently clear to cut out the types that you don't want to protect.

Mr. Clement.—We had a ruling from the Central Board of Revenue as to what alloy steel is. I cannot quote it off hand. I think that straight carbon steel would come under the protective duty.

Mr. Mather.—Not all steel.

Mr. Clement.—Crucible steel is defined by a process. Assuming for instance we deal with a high carbon steel produced in the open hearth by adding carbon in some form, either in the furnace before tapping or to the metal as it runs into the ladle, to obtain a higher carbon content than is usual in ordinary structural steel, as in the case of jumper steel, what are you going to do?

Mr. Mather.—It would be protected.

Mr. Clement.—That is the point I am coming to. We are getting in steels at about £11 to £12 per ton which must have been manufactured in this way. They just take a cutting edge. I am not able to deny that they would make cutting tools. Would you treat such steels as protected or otherwise?

Mr. Mather.—Protected.

Mr. Clement.—Under what head are you bringing it in the tariff?

Mr. Mather.—That presumably is brought out here "bars of kinds or qualities not specified elsewhere," the only kinds specified being crucible and alloy steel.

Mr. Clement.—There is an entry 'steel for springs and for cutting tools made by any process'. It does not limit the process to cementation or to crucible. I am only assuming that it is manufactured by the open hearth process and the carbon added during the process of conversion. It would be overcome of course if this item was limited to steel for springs and for cutting tools made by cementation, crucible or electric furnace. That rather gives us the trouble as to how it is to be defined.

President.—The trouble may arise in this way. The Customs Authorities may cut out something from the other end and then it may come within the protected part of the schedule even if we did not intend to give it protection.

Mr. Mathias.—How much of it does actually come in?

Mr. Clement.—Tons of it—chisel steel, jumper steel, etc.

Mr. Mather.—It is of course a small percentage of the total import of bars. Your trade returns show very little.

Mr. Clement.—Quite a deal of " other sorts " would be the steel that I am speaking of. I mention it simply because Mr. Sawday approached Government on the subject. The carbon content was high. We are dealing with a definite class of steel now. It is a high straight carbon class and it can be classified by a number here—' steel for springs and for cutting tools ' as it would not be complicated by any alloy.

Mr. Mather.—If it was, it would come under alloy steel.

Mr. Clement.—Steel for springs and cutting tools of Brinell hardness not less than 168—that would overcome the difficulty.

Mr. Mathias.—What hardness do you suggest?

Mr. Clement.—168.

President.—I should like to avoid putting it in this form, because you know how a protective scheme may be altered by the Customs Authorities, without meaning it, either by specifying or not specifying. I don't say that the Customs Authorities will do it. Therefore unless every time we kept ourselves in close touch with what the Central Board of Revenue was doing or what the Customs Authorities were doing, this schedule may be entirely changed.

Mr. Nind.—This can only be changed by legislation.

President.—We say ' not otherwise specified ', but you may specify them in some other place.

Mr. Mather.—I will give you an example. You may very reasonably, from the point of view of the Customs Administration or the Central Board of Revenue, reclassify some of the non-protected items in a way which shows that you are regarding as unprotected an item which we intend to protect. I think that was what happened in connection with plates. I believe I am right in saying at the time when the present protective scheme was introduced, you didn't have a separate entry for chequered plates in the tariff schedule. Is that correct?

Mr. Clement.—Yes.

Mr. Mather.—At the time we recommended the first scheme of protection, you had no special entry for chequered plates and we regarded them as being covered by ' ship, tank, bridge and common ' since they are of common quality. In the interval presumably the Central Board of Revenue has sub-divided the non-protected item and put chequered plates under that. We had expected that chequered plates would be classified as common plates. I don't particularly want to quarrel with the definition. But you can see the possibility that a redefinition of the other sorts without reference to the Tariff Board may probably result in an article being classified as non-protected which the Board intended to be protected.

Mr. Nind.—In making a recommendation, you can make them all in the statutory schedule which cannot be altered by the Central Board of Revenue.

President.—Supposing you put in an entry ' bars made to British standard specification ', and say 10 per cent. *ad valorem;* it would alter the scheme.

Mr. Clement.—I think you can eliminate any possibility which you speak of in this particular item, because I doubt whether any normalised steel for springs or cutting tools will ever be less than 168 Brinell hardness. It is quite possible to include in this "steel for springs and for cutting tools."

Mr. Mather.—Possibly the best thing would be to apply a protective duty to bars of kinds or qualities not specified elsewhere and containing not more than a certain percentage of carbon. I think that it will entail a fairly long definition to make any differentiation by carbon content.

Mr. Clement.—I simply mention it in passing so that you may take note.

President.—This point actually arose under the old definition. For we intended that bars, which are made to British Standard Specification, should be protected. Recently a ruling was given in some places that the British Standard Specification bar was not a common merchant bar and therefore it was subject to the revenue duty.

Mr. Clement.—You must blame your own phraseology—'common merchant'—for that.

President.—We took it from the schedule as it was before we reported.

Mr. Clement.—If you ask anybody in the trade, they would tell you 'common merchant bar' covers such bar which is produced in the ordinary commercial way without any particular test. No manufacturer will guarantee any particular tensile or elongation for common merchant bar, but when we bring steel into class (*a*), (*b*) or (*c*)—British Standard engineering specification, it will have definite elongation, definite limit of phosphorus content and sulphur content and definite tensile. Common merchant bar falls outside this altogether.

Mr. Mather.—That is of course a matter of interpretation. That has clearly been eliminated.

President.—I should like some other way of defining by which even if it became necessary for administrative purposes to alter the other entries, this entry was not affected. For instance all steel bars of less than a maximum carbon content should be subject to a certain duty.

Mr. Clement.—That would bring it down to chemical analysis which is very difficult. Brinell hardness can be taken by a rough and ready method within 10 units.

Mr. Mather.—In 99 cases out of 100 it will not be necessary actually to make the test.

President.—The only way we can do it is by putting all the entries into the statutory schedule which are likely to affect this main entry. Of course it may not be convenient for the Central Board of Revenue to be tied down to the statutory schedule, but we must safeguard our scheme first. That is the position.

Mr. Clement.—Any way I have mentioned the thing.

President.—A chemical test is not an easy test.

Mr. Nind.—We should like to avoid that if possible.

President.—Will there be many entries to be put into the statutory schedule?

Mr. Clement.—I don't think so.

President.—You must apply some test, but the question is whether you should apply a rough test or some accurate test.

Mr. Mather.—In 99 cases out of 100 it would not arise.

Mr. Clement.—I would not say that. There is the spring wire . . . .

Mr. Mather.—That of course will be considered when we deal with wire. Anything which may be regarded as bar and rod under ½ inch does not come within our protective scheme. We are not dealing with wire in this draft.

President.—What do you suggest as an alternative to prescribing a chemical test?

Mr. Clement.—We have nothing to suggest except the hardness test which is simple to carry out.

President.—Or putting all these entries into the statutory schedule.

Mr. Mather.—Still the question of definition remains.

President.—I want to safeguard the scheme against any alteration in 'not specified elsewhere' because by specifying it elesewhere, you may take it out of this schedule and that is what I wish to avoid. This is where we should be advised by experts. As I stated just a few minutes ago, it actually happened in the case of bars made according to British Standard Specification.

Mr. Clement.—I don't think that the case arises in this particular instance. You are going to include this exclusion in the Statutory Schedule. It is only just a matter of few words. We are concerned with carbon steel of a definite class and there is a definite relationship between Brinell hardness and carbon content: at least I have been given to understand so.

Mr. Mather.—It chiefly hinges on the rough and ready nature of the test unless you make special arrangements for accurate testing in doubtful cases.

Mr. Clement.—We can test Brinell hardness within a limit of three numbers. It would be safe to fix 168; that number corresponds to 39 tons tensile and a carbon content of I think ·45.

Mr. Mather.—We can easily decide what the limit should be.

Mr. Clement.—I think that Mr. Mather understands what is required.

President.—So far as the technical aspect of the case is concerned naturally we should be advised by the expert but I am concerned merely with the point that I just now told you, *viz.*, that no change in the entries subsequently made should affect our proposals.

Mr. Clement.—Give us some time to consider that.

Mr. Mather.—I should like to have your advice on this point. The present protective item stands as follows:—"Common merchant, and bar and rod, designed for the reinforcing of concrete, all sizes." In this paragraph as it stands at the present moment, there is no reference to reinforcing bars. Can you tell us what form of reinforcing bars come to India? Are they usually plain sections or are they some special shapes?

Mr. Clement.—Some of them are straight bars but very often they are bent into a wavy form.

Mr. Mather.—They would presumably come under the protective duty, if they are round flat or other sections within limits.

Mr. Clement.—Some of them come in forms not exactly cruciform but something like cruciform.

Mr. Mather.—Those would not come under the definition of protected bars as it now stands in the draft.

Mr. Clement.—I have seen cruciform and spiral but we have had no difficulty about it.

Mr. Mather.—I left that until I got your opinion. The question is whether the kind of material that comes in should be included or not. Suppose we added to this definition of the kind of bar which is to be protected the words bar designed for the reinforcing of concrete, would that give you any difficulty?

Mr. Clement.—No. We have found no difficulty so far. We had one reference to the Board but that was not in connection with bar: it was in connection with triangular mesh.

Mr. Mather.—That of course is a different thing. That would not come under this.

Mr. Clement.—No.

Plates, sheets and cuttings.

President.—What about plates?

Mr. Clement.—As regards plates, some difficulty has arisen regarding plate cuttings which overlap universal bars.

President.—What are universal bars?

Mr. Clement.—Universal bars are rolled plates which are rolled on a universal mill. The difference between universal bars and ordinary plates is that in the case of the former the edge is actually rolled on the universal mill itself. The narrower sections will be flat bars.

Mr. Nind.—We have had difficulty with regard to plate cuttings.

President.—We are proposing a duty of only Rs. 5 more on plates than on cuttings. It is hardly worth while putting it in.

Mr. Clement.—Drop cuttings out altogether.

President.—It certainly would give a certain amount of administrative difficulty. If a man imports plates cut to sizes, not only does he get the proper size he wants but he also escapes paying the duty.

Mr. Nind.—(Showed an invoice and explained).

President.—If you send us a copy of the invoice which you just showed us, and say that this was the sort of claim made it would serve our purpose.

Mr. Nind.—Yes.

Dr. Matthai.—This difficulty applies to all kinds of cuttings.

Mr. Clement.—Yes. It is possible to bring sheets sheared to sizes. If there is any advantage to be gained by that, it is quite easy for an indent to be placed at home for such sheets.

Dr. Matthai.—What about tinplate cuttings.

Mr. Clement.—Tinplate cuttings are small bits.

Mr. Mather.—You don't have really any difficulty as regards tinplate cuttings.

Mr. Clement.—We have some difficulty but not much. As a matter of fact we have been passing certain kinds as cuttings which are not full sizes. There are certain cuttings in tinplates which are brought in to manufacture small containers.

Mr. Mather.—They can be brought in cut to certain sizes.

Mr. Clement.—For oil containers they will be cut to definite sizes. They will be rolled to standard sizes.

Mr. Clement.—Reverting to the invoice produced by Mr. Nind. It is quite possible that these are the cuttings from universal bars. Unfortunately I was not here to examine the specimen.

President.—If we brought cuttings under the same description as the plates themselves, that difficulty would not arise.

Mr. Clement.—That difficulty won't arise. But the difficulty will be in classifying whether a universal bar can be considered a plate or a bar.

President.—You can take it as either. In either case, it would come under the protective duty.

Mr. Nind.—If you have different rates of duties, the difference in duty will give us an awful lot of trouble.

Mr. Clement.—The narrow universal plate is a flat.

President.—The difference is not very great. As regards Continental material it is Rs. 37 and Rs. 36 and as regards British material Rs. 26 and Rs. 20.

Mr. Clement.—Personally I think that it is a matter of including universal plates up to a given width under ' bar and rod.'

Mr. Mather.—We are not putting a duty on flats more than 8 inches wide I do not think there are universal plates under 8 inches, so that in so far as material rolled on a universal mill can reasonably be regarded flat bar we do not put a protective duty on it. If it gets to the stage of being a plate rather than a bar, then it should have a protective duty.

Mr. Clement.—It is really up to you to lay down a limit.

Mr. Mathias.—Actually of these plate cuttings that come into Calcutta how much would ordinarily be regarded as cuttings?

Mr. Clement.—I have seen very little genuine cuttings, and the cuttings have diminished because I think firms importing them are not doing any business now.

Mr. Mathias.—What you refer to as cuttings includes not only what would usually be called scrap fit only for remelting but also pieces of some size which could be used in substitution for the complete article. The latter probably fetch a good price, do they not?

Mr. Clement.—Not less than £5 a ton. We know they are going to the manufacturer of small articles.

Mr. Mathias.—And in regard to sheet cuttings?

Mr. Clement.—We do not get sheet cuttings because sheets are cut down to 2½′ × 2′; that is about the smallest size of sheet that comes in. I do not remember to have seen sheet cuttings coming in.

Mr. Mathias.—So you think the import is not considerable?

Mr. Clement.—Not considerable, but we know of plate cuttings which pass as cuttings scrap and then go into the manufacture of small articles. For instance in the case of this invoice which I have just shown.

Mr. Mathias.—These are really plates?

Mr. Clement.—Personally speaking from the workshop point of view these are plates for definite purposes. For instance in this particular case we know that to get a pipe flange say 18″ diameter it is a matter of having to cut down a piece to the dimension of the flange required.

Mr. Mathias.—If you put a full duty on plate or sheet cuttings what it comes to is this: you are merely defeating what is in essence an attempt to get the stuff through the customs at lower than the proper rate?

Mr. Nind.—That is what it comes to really.

Mr. Clement.—The cuttings which we are dealing with are suitable for the man who wants to avoid the duty and compete with the man who is bringing whole plates for the competitive job. Universal bars would give us a limit.

President.—Let us take sheets now.

Mr. Clement.—It is possible to land a certain class of these fully cleaned sheets, two passes cold rolled, at Rs. 170 per ton but we propose to fix a tariff rate this year of Rs. 250 based on the genuine article. But it is possible—(I have actually seen it)—for sheets which would pass this test to be landed here at £13 a ton.

Mr. Mather.—That is Rs. 170, on which there would be a 10 per cent. duty.

Mr. Clement.—That is Rs. 187.

Mr. Mather.—As a matter of fact they come under your tariff valuation because they are of the same class as controlled by the present definition.

Mr. Clement.—In that case the tariff valuation only holds good for a year and it is only in the matter of clean sheets that we have got this valuation.

Mr. Mather.—If we add 10 per cent. to Rs. 170 the landed price in India is brought to Rs. 187 per ton. That would just be sufficient to prevent them from competing with the common black sheet.

Mr. Clement.—£9-15-0 for black sheets.

Mr. Mather.—The Continental thicker ones are not so expensive.

Mr. Clement.—The normal kinds that are coming here—3 to 6 per bundle—are round about £9 to £10. I am speaking of the thin sheets, the same gauge corresponding to the cold rolled sheets which come in. That is Rs. 187 against 206, and it will make the importers revert to pickled and two-pass cold-rolled and defeat the object of the duty finally.

Mr. Mather.—There you meet the permanent difficulty of putting one duty against sheets of different thicknesses. We based our duty on what we regarded as the average price of sheets of various thicknesses. We do not find that the average black sheets including the thicker as well as the thinner one are being brought out at about Rs. 187 or Rs. 190 a ton. But if sheets under this non-protected definition are not likely to be brought out prices as low as the average price of protected sheets, then for our purposes the scheme is defective.

Mr. Clement.—Taking a range of prices you are quite right. We have to check the majority of the importations of the kind which overlap the cold rolled. Why make a distinction: why not flatten the whole thing out?

Mr. Mather.—Your suggestion is that the protective duty should be applied to all sheets of any kind?

Mr. Clement.—Yes.

Mr. Mathias.—Can you tell us how the distinction between the two classes arose?

Mr. Clement.—The origin of the item was to bring in all sheets which had the suspicion of cleaning or cold rolling because at that time the duty was much more than for absolute black sheets hot rolled. The Tariff Board in formulating their proposal lifted the whole thing bodily, but it rather acted against us.

Mr. Mather.—In the original scheme of protection we left that out. For reasons which appeared good to the Customs authorities, they had already divided sheets into two separate classes and the Tariff Board did not interfere with that division.

Mr. Clement.—It would be an advantage to keep the two things together.

Mr. Nind.—This is of course not purely from the Customs point of view. It seemed to us on looking at these figures that the object of the protection might be defeated.

Dr. Matthai.—Are you likely to have any difficulty in telling clean sheets from partially clean ones?

Mr. Clement.—Not at this port.

Dr. Matthai.—In other ports?

Mr. Clement.—Judging from the remarks I have heard there has been a certain amount of difficulty, and on the top of that again certain sheets which have been passed here as black sheets, have been declared to be clean sheets quite recently by the Metallurgical Inspector at Jamshedpur on samples being sent from Madras.

President.—In whose interest was this entry put in " Annealed, pickled or cleaned by acid or other material or process "?

Mr. Clement.—Originally Government's. We wanted to make a differentiation between the various kinds in the tariff valuation. There was a description which gave rise to a lot of trouble—I cannot remember the exact phraseology at the moment—we were in difficulties; then this was framed and it worked all right, as long as black sheets gave less duty than clean sheets. Now black sheets pay a higher duty than clean sheets; that is what we are up against.

President.—If this entry is cut out?

Mr. Clement.—And bring the clean sheets on the same basis as the black sheets.

President.—Is that what you suggest?

Mr. Clement.—Yes.

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President.—That of course would be in the interest of the protected industry.

Mr. Clement.—Undoubtedly.

President.—Is this tariff valuation going to be changed this year?

Mr. Nind.—Yes.

President.—The duty would then be Rs. 25?

Mr. Clement.—He would actually pay Rs. 286 for the genuine sheet and under the revenue duty he would pay Rs. 275.

President.—Then it is hardly worth while retaining this distinction; it is only a matter of Rs. 11.

Mr. Clement.—The Continental sheet would be about £14 *plus* Rs. 59; that would be about Rs. 246.

President.—Then there is a big margin between this Rs. 246 and 286: Rs. 40 and it would pay the importer to spend Rs. 15 or so in cutting it here. Of course so far as the British price is concerned there is no point in keeping this distinction, but as regards the other if the difference is as large as Rs. 40 a ton then it would pay a man to get this process performed and get the thing at a smaller rate. That is my point. It is just precisely against this sort of competition that this double tariff—the basic duty and the additional duty—is devised, but it would be defeated by an entry like this.

Mr. Clement.—I think you have grasped our point.

President.—Your suggestion is that it should be deleted.

Mr. Clement.—I say it would give a lot of trouble. It is a thing that happen daily.

President.—What is the point of keeping this entry if it doesn't benefit anybody? It might just as well be deleted.

Mr. Clement.—Cuttings could be knocked out of the protective duty.

President.—If it was cut out, it would not hurt anybody.

Mr. Clement.—It would come automatically under ' Iron or steel, all other sorts not otherwise specified '—15 per cent.

President.—Black sheets and the cuttings come under the same duty.

Mr. Clement.—Black sheets are protected.

Mr. Mather.—If no genuine cuttings are imported, it is no use giving this exemption?

Mr. Clement.—The cuttings which would be imported might be in competition with sheets; that is to say if a man instead of importing sheets of 2′ × 6′ which is the size he wants, imports sheets of 2′ × 2′, we should have to admit them as cuttings which would defeat the object of the tariff.

Mr. Mather.—It would be the same thing as in the case of plates?

Mr. Clement.—Yes.

Mr. Mathias.—Except in the case of tinplates where you get small cuttings.

Mr. Clement.—I don't think people would buy in the ordinary way black sheets for melting.

Mr. Mathias.—Supposing cuttings of black sheets, were removed altogether from the schedule, would that give any difficulty?

Mr. Nind.—If you merely delete the entry of cuttings we are up against exactly the same difficulty as at present.

Mr. Clement.—Your suggestion places under the protective duty all cuttings.

Mr. Mather.—One might delete the separate entry ' cuttings ' and link them with black sheets.

Mr. Clement.—We can discriminate in the matter of cuttings. If sheet cuttings became scrap, they would come in as scrap. If any are really cuttings, they cannot compete with sheets themselves.

President.—Genuine cuttings might come in as scrap.

Mr. Clement.—If you had sheets and cuttings, we would have to put them all in.

President.—Very small cuttings are used by Hukumchand's for instance.

Dr. Matthai.—I suppose your suggestion would be to drop the word cuttings" altogether.

Mr. Nind.—We are up against the same difficulty in that case. The importer will come along and say "This is a cutting and not a sheet and therefore comes under other sorts of iron or steel."

President.—The best thing is in such cases, if we really decide to remove the difference in duty between the two, to put cuttings along with black sheets—"black sheets and cuttings thereof." As regards the rest if there are small bits you can treat them as scrap.

Mr. Clement.—You want cuttings to be included under the heading "Metallic ores, and scrap iron or steel for re-manufacture."

Mr. Nind.—I think the word 'old' ought to go out of item No. 32—"Iron or steel, old."

Mr. Mather.—Supposing your suggestion was agreed to and no difference was made between the ordinary black sheet and these sheets, cold rolled, pickled an so on, should we not then define such sheets as are to remain under the revenue duty and then say that all other sorts including cuttings will come under the protective duty?

Mr. Clement.—Trouble would arise at once in this way. They would say "these are black sheets and these are all other kinds." The tariff is defeated again.

Mr. Mather.—My suggestion was that black sheets should not be mentioned.

Mr. Nind.—Simply put "sheets under $\frac{1}{8}$ inch—fabricated" under the Revenue tariff and all other sorts of sheets under the protective tariff.

Mr. Mather.—What will have to be done under this head is first of all to describe those sheets which are to be subject only to the revenue duty or to a different protective duty like the galvanized sheets and then say that "all other kinds" will come under the protective duty.

Mr. Nind.—The item I was looking at, is the fabricated one. We merely have two entries—galvanized and fabricated and then all sorts.

Mr. Clement.—That would be all right.

Mr. Mather.—That raises another question about which I wished to ask you before we dealt with it in the draft. Are there no other sorts of sheets coming into the country apart from galvanized, black sheets and annealed and pickled sheets? Don't you get lead coated sheets?

Mr. Clement.—We do; for instance terne-plates.

Mr. Mather.—Under what are you putting them now?

Mr. Clement.—Under all other sorts.

Mr. Mather.—Plates coated with metal other than zinc.

Mr. Clement.—Yes, that overcomes the difficulty.

Mr. Mather.—That is one of the difficulties I thought of. That is an obvious way to avoid it. Are there any other kinds of sheets?

Mr. Clement.—There is only the highly finished sheet which is used for motor car bodies. The silvery sheets would be clean sheets, and would be cold rolled. I know of no other sheets and in any case if it was an extraordinary thing, it would not fall under (*a*), (*b*), (*c*) and (*d*), but it would be under 'all other kinds'—15 per cent.

President.—Supposing I take a sheet and put what you call the aluminium paint on that.

Mr. Clement.—We should treat that as a sheet. We get varnished hoops.

President.—It is very much like a tinned sheet. I call it paint, but really it is not.

Mr. Clement.—We should say it was for protective purposes only.

President.—When you say 'coated,' I say aluminium coated. I want to know how the Customs would actually deal with it.

Mr. Mather.—You have got an item under Bar and Rod 'galvanized or coated with other metals' 10 per cent. Supposing you had an aluminium painted rod would you regard it as "coated with other metals"?

Mr. Clement.—Certainly not.

President.—Supposing—it is aluminium, which is a metal . . .

Mr. Clement.—Because it is not positive.

President.—It does not say so.

Mr. Clement.—We are up against a similar thing in connection with jewellery.

Mr. Mather.—The only satisfactory way would be to define the small number of sheets which will come under the revenue duty and then say that all other sorts will come under the protective duty.

President.—There is a substantial difference between the two. If it is to be 10 per cent. instead of Rs. 59, that makes a lot of difference. On the Continent they might invent something that gives a coating which makes it more serviceable and comes under the duty of 10 per cent.

Mr. Clement.—I understand that black and black finished sheets would be protected and now the President's point is that paint may be treated in the same way.

President.—It is called paint, but it is not really paint.

Mr. Clement.—The black sheets and those cold rolled pickled and cleaned (the descriptions which I have given now) will cover the two kinds: this is supported by the definitions given by the Chairman of Management, London Iron and Steel Exchange, in his recent publication.

Mr. Nind.—I have got a point noted here about galvanized sheet.

Mr. Mather.—As regards galvanized sheets, we recommend that a protective duty should be applied to "galvanized sheets, all kinds and shapes." I would like to hear what you have got to say.

Mr. Nind.—You have suggested an alteration to the entry in the schedule "galvanized sheets, all kinds and shapes" instead of "galvanized whether corrugated or flat."

Mr. Clement.—You have suggested "all kinds and shapes." Then an argument would arise as to whether a flashing is a galvanized sheet or not. It is a galvanized sheet but bent at right angle. At present it comes under "fabricated."

Mr. Mather.—Do you have cuttings in galvanized sheets?

Mr. Clement.—Just a little. There have been promiscuous importations. Flashings and ridgings under the old tariff schedule came under the head "Beams, joists, pillars, girders, and other structural shapes."

Mr. Clement.—As regards flashings, they are used at the junction of a roof with a chimney, to keep the rain from getting in through the joint: a kind of flange put round.

Mr. Nind.—And that you want to come in with the galvanized sheet?

President.—That should be included as you suggest.

Mr. Nind.—I think that it would not be a bad thing to do so.

President.—We have been treating it as fabricated steel.

Mr. Nind.—Apparently, it has come into the country as that.

President.—There is no harm in putting it in along with ridgings.

Mr. Mather.—The duty on galvanized sheets is reduced. 15 per cent. on the fabricated article might give you a bigger duty than Rs. 38 a ton.

Mr. Nind.—The point is that it has been a question of dispute whether the galvanized sheet includes flashings, ridgings, etc. If you want to include them, it is best to put them in. If you don't want to include them, you must say "excluding flashings and ridgings."

President.—We are not so much concerned with the revenue primarily as with the protection of the article.

Mr. Nind.—You must say definitely whether they should be included or excluded.

Mr. Mather.—I think that "all kinds" should cover them. Supposing we say "galvanized sheets, all shapes and kinds."

Mr. Clement.—The question for decision is whether the article is finished on the rolls or by an additional process. Take for instance the curved tops of Railway wagons. The curve is produced by rolls. You must limit the amount of fabrication on the sheets. If work is performed after leaving the rolls, it is fabrication. Up to the point of rolling, it comes under 'galvanized.'

President.—Do you mean after galvanizing?

Mr. Clement.—Usually cold rolling takes place before, and curving after, galvanizing.

President.—Is it simply a matter of shape?

Mr. Clement.—Yes.

Mr. Mather.—Supposing we said "galvanized sheets, all shapes and kinds"..........

Mr. Clement.—When a galvanized sheet comes as a bucket. . . .

President.—If we started specifying, we would have to go into each and every article. I think that if we confined our attention more or less to those cases in which difficulty has arisen so far, it would be sufficient.

Mr. Clement.—We had difficulty with galvanized sheets for cooly huts with curved tops. I have come across a case in which galvanized sheets for railway wagons were claimed as the component parts of wagons.

President.—The best thing is to include rolled sheets in this.

Mr. Clement.—As long as it is considered so, curving is rolling.

Mr. Mather.—Corrugation is commonly done by pressing and not by rolling.

Mr. Clement.—You can say 'rolled or pressed.'

President.—"Galvanized sheets—rolled or pressed"—that would eliminate fabricated articles like buckets.

Mr. Clement.—Yes.

President.—Anything else under that head?

Mr. Clement.—Nothing.

Mr. Mathias.—What about galvanized cuttings?

Mr. Clement.—Not much comes in.

President.—I think that it would be simpler, if galvanized cuttings do not come in any large quantities, to put them along with sheets.

Mr. Nind.—Yes.

Discs and Circles.

President.—As regards discs and circles, we have decided to drop them for this reason that the Steel Company say that they are not going to manufacture them. Unless the steel circles which are imported are cut into squares here, there is no point in putting in this entry.

Mr. Mathias.—If squares are made out of imported circles, about half the circles would be lost.

Mr. Clement.—To make a circle is of course a simple problem, but I think that the labour and material involved in making a circle, and again making it into a square, would be too much to get any advantage.

President.—The only way in which the question may arise is as regards paint drums. When a man wants to make these, he may just import the discs—tops and bottoms.

Mr. Clement.—He has still the question of the side to consider which is nothing but sheet.

President.—At present discs and circles are under the protective tariff. The Steel Company has said that it is not going to manufacture discs. But a man going in for the manufacture of containers may, if the duties are removed, import tops and bottoms.

Mr. Clement.—The ordinary sheets for drums are coated with metal.

President.—I am not talking of the importation of drums as such. But supposing the paint industry wants to make these drums here, they may say "let us avoid the wastage of metal. We will get them cut to sizes and pay the *ad valorem* duty." As regards the sides they can get the sheet required to make them. Now the suggestion is that discs and circles should be removed from the protective tariff. Supposing we accepted this suggestion might not this happen?

Mr. Clement.—We are not only concerned with discs and sides of containers but with rice bowls. I think that there was some idea to make the duty on discs and circles the same as that on rice bowls.

Mr. Mather.—If this item 'discs and circles' were completely eliminated, would you treat them as fabricated material?

Mr. Clement.—Strictly speaking, they would be fabricated, though the manufacture has not advanced to the stage of a finished article.

Mr. Mather.—At present, there is the same specific duty on these circles as on the plates and sheets from which they are cut.

Mr. Clement.—The duty on plates, all kinds fabricated, is 25 per cent. *ad valorem* but the duty on sheets, all sorts, fabricated, is only 15 per cent. *ad valorem.*

President.—Do you think that it would not do any harm to retain these entries as they are to-day?

Mr. Clement.—If you wish to treat them as protected and delete the entries without making any provision, they would automatically fall under Iron or Steel, all other kinds not otherwise specified.

President.—Discs and circles you can hardly call fabricated steel?

Mr. Clement.—It is according to our definition.

Mr. Mathias.—Its exclusion from the tariff would be an inducement to people out here to import them instead of manufacturing discs and circles from Tatas plates and sheets?

Mr. Clement.—I think they do import largely; they do not manufacture these in this country. They can import cheaper, I think.

President.—Let us take sleepers on.

Mr. Clement.—What about bearing plate bars: Corrugated sleeper bars also come out to India.

President.—They are not protected.

Mr. Mather.—Bearing plates are included in the other entry under "Railway track material." Which railway gets them?

Mr. Clement.—They are used on the Bengal Nagpur Railway.

Mr. Mather.—As far as sleepers are concerned our duty of Rs. 10 a ton is not likely to be above your 10 per cent. *ad valorem* duty. Even if it is regarded as bar it will not come within the definition of the bar that is protected, because it is not of that shape.

Mr. Clement.—With regard to wrought iron bar assessable at the specific rate you have a new description. A great many invoices come out describing common merchant steel bars as iron bars. These consignments run into tons and we are sorting out things of this kind for the sake of Rs. 5 a ton. This gives us a lot of trouble.

Mr. Mather.—You find them so often coming in as iron that you have to contest in almost every case; is that what you mean?

Mr. Clement.—Why give us this trouble at all. I mean to say it takes up one's time unnecessarily.

President.—You think this Rs. 5 ought to be taken away?

Mr. Clement.—Yes. It leads to a great deal of correspondence sometimes.

Mr. Mathias.—The Customs authorities consider it unnecessary for administrative purposes?

President.—Does that apply to sections too?

Mr. Clement.—Everything. Your new structural definition will help us out with regard to fencing material.

President.—Are there any other suggestions that you would like to put before us?

Mr. Nind.—I know of nothing more at present.

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16. INDIAN STORES DEPARTMENT.

(1) *Letter from the Controller of Inspection, Calcutta Circle, dated the 23rd July 1926.*

I have the honour to forward herewith for the information of the Tariff Board a statement showing the number of steel castings manufactured by Messrs. Hukumchand Electric Steel Works Limited from April 1925 to date which were inspected by this Department. I trust that the information given therein meets the requirements of the Board.

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Statement of Axleboxes *passed at Messrs. Hukumchand Electric Steel Works from April 1st, 1925, to July 19th, 1926.*

Ordering No. Authority.	Order No.	Date.	Number on order.	Number passed to date.	Rejected in first inspection and returned for rectification.		Number finally rejected on subsequent inspection.	
					Number,	per cent.	Number	per cent.
O. & R. Railway	15/CS/2AS (*a*)	6th February 1924	20,000	964	7	0·72	1	0·10
E. B. Railway	14805	2nd December 1924	250	250	0	..	2	·8
N. W. Railway	1/151 CW	9th April 1925	100	100	0	...	0	...
N. W. Railway	2/CW (*b*)	12th May 1925	1,560	1,560	99	6·34	12	·76
N. W. Railway	3/428 CW	7th July 1925	50	50	0	...	0	...
E. B. Railway	12002 (*c*)	4th July 1925	50	50	50	100	7	14
E. I. Railway	2772	26th May 1925	5,000	2,325	442	19·01	158	6·79
E. B. Railway	14843	10th August 1925	100	100	0	...	1	1·0
I. S. Department	N3453/4	23rd November 1925	24	24	0	...	0	...
E. B. Railway	21001 (*d*)	17th November 1925	200	200	200	100	4	2·0
E. B. Railway	21012	17th November 1925	200	200	152	81	7	3·5
E. B. Railway	1709	21st/23rd January 1926	50	42	8	19·04	0	...
		TOTAL	...	5,865	958	18·24	192	3·27

Rejections made by manufacturer after his own inspection are not included in the above statement.
Axleboxes passed as castings to go for machining are not included in this statement.
(*a*) Order subsequently cancelled.
(*b*) These axleboxes were passed by the Controller of Inspection but did not satisfy the consignee and matter is still under discussion.
(*c*) and (*d*) Boxes rejected by consignee for further rectification.

(2) *Letter No. D.-116, dated the 9th August 1926, from the Chief Controller of Stores, Indian Stores Department.*

In continuation of my letter No. D.-116, dated the 9th August 1926, I have the honour to forward the following notes containing the information asked for by the Tariff Board in connection with the manufacture of Screw Couplings, Rails, Wagons, Locomotives and Component parts thereof in India:—

(I) Note regarding the Screw Couplings manufactured by the Angus Engineering Works from Tata's material for the Peninsular Locomotive Company.

(II) Result of investigation into the causes of breakages of rails (with reference to the complaint from the Madras and Southern Mahratta Railway).

(III) Note on the capacity of wagon building firms in India, including Messrs. Jessop and Company's structural works at Jamshedpur.

(IV) Note on the percentage of materials and component parts of local manufacture used by wagon building works in India.

(V) Note on the capacity of the Peninsular Locomotive Works to build locomotives while engaged on turning out wagons.

(VI) Comments by the Chief Controller of Stores on the reply given by the Peninsular Locomotive Company to the Tariff Board's enquiry regarding component parts of locomotives.

2. A report on the tests carried out by this Department on the products of the Agricultural Implements Company, Limited, is also enclosed. The Board also desired to know if possible how the prices of these implements and of the fittings manufactured by the Angus Engineering Works compare with the imported prices of similar articles. I regret to say that I am unable to furnish this information from the records of my office.

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I.—Note regarding the Screw Couplings manufactured by the Angus Engineering Works from Tata's material for the Peninsular Locomotive Works.

I give herewith particulars of the circumstances which led up to the complaint from the Angus Engineering Works against "D" quality steel supplied to them by the Tata Iron and Steel Company.

In April 1925, the Angus Engineering Works ordered a quantity of "D" steel of various sizes, some of which was required for wagon components, orders for which had been placed with them by the Peninsular Locomotive Company.

The Angus Engineering Works placed the order with the proviso, that, it was to be subject to test in their laboratory and liable to rejection if found to be not in accordance with the specification. Tatas were unwilling to accept this condition, but offered to supply with the material certificates of test from the Metallurgical Inspector. After some correspondence this was agreed to. The Angus Engineering Works, however, examined the bars on receipt and found that the 2¼″ rounds were not in accordance with the specification, the tensile strength being high and the metal insufficiently ductile. Retests on other bars showed that the character of the metal changed from circumference to centre, the core being very hard. Samples were also examined by the Government Test House, Alipore, and the Metallurgical Inspector which confirmed the results obtained by the Angus Engineering Works.

I attach herewith (Annexure A) copies of two of the tensile tests carried out by the Metallurgical Inspector on the material before despatch which show that it was satisfactory and a copy of the Metallurgical Inspector's report on the defective bars reported by the Angus Engineering Works (Annexure B). The cause of the defect in the latter was traced to segregation in the ingots, the results indicating that insufficient crop had been cut from the ingots before rolling. The effect of this was that although the centre of the rolled bars were satisfactory as shown by the original certificates the ends containing the segregations were variable in structure and defective. The defect is a rolling mill fault. Having certified the material the Metallurgical Inspector nominally shares the responsibility for the defective material with the makers, but it is obvious that actually his supervision of the manufacture cannot extend to watching every ingot being cropped.

As a result of this complaint the Metallurgical Inspector has been enabled to take steps to avoid a recurrence of defects such as the one brought to light by this case.

I was informed by Messrs. Tata's representative with whom I discussed the matter that the firm had themselves taken steps to avoid a recurrence of such complaints, and I am of the opinion that the failure in this case cannot be taken as an indication that Tatas are unable to manufacture "D" class steel up to the required standard: it merely shows that insufficient crop had been taken from the particular ingots from which these particular sections were rolled.

(ANNEXURE A.)

TRUE COPY.

THE TATA IRON AND STEEL COMPANY, LIMITED.

JAMSHEDPUR,
Dated the 15th July 1925.

"D" CLASS.

CHARGE TEST CERTIFICATE NO. 824.

For Open Hearth Steel Bars.

Supplied to Messrs. Angus Engineering Works, Bengal, on 11th July 1925.

Order No.	Section.	Charge.	Breaking stress (tons) per sq. inch.	Elongation per cent. on 8 in.	Phos.	Sul.
C. 14956	2¼″ Rounds	28952	42·0	23·0	·032	·033
	..	28962	40·2	27·0	·019	·029
	..	31250	40·7	25·0	·036	·023

The above material were rolled from Basic Open Hearth steel and passed the mechanical tests prescribed in B. S. Report No. 24, Sp. 9-21, Class "D." the results of the tensile tests are shown above.

Sd.
Government Metallurgical Inspector.
For The Tata Iron and Steel Co., Ld.,

Sd.
Chief Chemist.

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(ANNEXURE A.)

TRUE COPY.

THE TATA IRON AND STEEL COMPANY, LIMITED.

JAMSHEDPUR,
Dated the 30th June 1925.

" D " CLASS.

CHARGE TEST CERTIFICATE No. 769—1.

For Open Hearth Steel Bars.

Supplied to Messrs. Angus Engineering Works, Angus, Bengal, on 23rd June 1925.

Order No.	Section.	Charge.	Breaking stress (tons) per sq. in.	Elongation per cent. on 8 in.	Phos.	Sul.
C. 14956	2¼″ Rounds	28952	42·0	23·0	·032	·033
	..	28962	40·2	27·0	·019	·029
	..	31199	41·6	21·0	·037	·033

The above materials were rolled from Basic Open Hearth steel and passed the mechanical tests prescribed in B. S. Report No. 24, Sp. 9-21, Class " D." The results of the tensile tests are shown above.

Sd.
Government Metallurgical Inspector.
For The Tata Iron and Steel Co., Ld.,

Sd. A. BOSE,
Chief Chemist.

(ANNEXURE B.)

TRUE COPY.

GOVERNMENT OF INDIA.

INDIAN STORES DEPARTMENT.

REPORT BY METALLURGICAL INSPECTOR, JAMSHEDPUR.

At the request of Messrs. The Angus Engineering Works Limited, Angus, Bengal, in their letter No. 1984 of 31st August 1925, to the Superintendent, Government Test House, the three bars reported on below were tested for their suitability for making "D" class forging according to British Engineering Standards Association's Specifications 8 and 9 of Report No. 24—1921.

Three bars 2¼ inch round.

"D" Class Steel supplied by the Tata Iron and Steel Company, Limited.

The bars were received in this office on 13th August 1925. They were marked by the Angus Engineering Works as follows:—

(1) T N 4780 1st.
(2) T N 4838 1st.
(3) T N 4838 2nd.

Macro examination.—A cross section from each bar showed by Sulphur Print and also by pickling in dilute sulphuric acid considerable segregation, No. 1 being more segregated than (2) and (3).

Microscopic Examination confirmed the above. No. (1) piece showed "D" class steel near the outside, Rail steel (·55 to ·65 carbon) further inwards and a very high carbon steel near the centre. Nos. (2) and (3) showed normal "D" class steel but with a certain amount of segregation near the centre.

Analysis.—Drillings for analysis were taken from two parts of the bars with a ⅝″ drill as indicated in the diagram.

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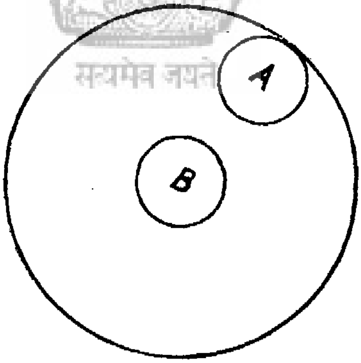

——		Carbon.	Manganese.	Sulphur.	Phosphorus.
		Per cent.	Per cent.	Per cent.	Per cent.
No. 1	A	0·58	0·75	0·025	0·022
	B	0·82	0·84	0·044	0·041
No. 2	A	0·49	0·68	0·026	0·035
	B	0·64	0·73	0·045	0·052
No 3	A	0·47	0·68	0·026	0·033
	B	0·63	0·73	0·047	0·055

These figures indicate a considerable amount of segregation near the centre. The (A) results of Nos. (2) and (3) probably conform fairly closely to the ladle sample analysis of the cast from which these bars were rolled.

Tensile tests.—Portions of the bars were forged down to about 1½ inch squares, normalised and then machined for tensile tests. The test pieces, machined from the centre of the bars, were ·564″ in diameter with a gauge length of two inches.

——	Yield point (tons per sq. in.) by dividers.	Maximum stress (tons per sq. in.)	Elongation per cent on 2 ins.
No. 1	30	59·0	13·5
No. 2	26	51·5	12·5 (OMP)
No. 3	26	51·6	16·0 (OMP)

Conclusions.—All three bars showed considerable segregation near the centre and gave higher maximum stress than specified (40 to 45 tons per square inch). The results indicate that insufficient crop had been cut from the ingots during rolling. These bars are not considered suitable for forging railway wagon shackles.

It is not known from which casts these bars were rolled but they were presumably supplied to the Angus Engineering Works by Messrs. Tatas under test certificate No. 769—1 of 30th June 1925. This certificate mentions casts No. 28952, 28962 and 31199. Bars 2¼ inches diameter from these casts were tested by this office according to British Engineering Standard Association's Report No. 24, Specification No. 9 of 1921 for "D" class steel with satisfactory results.

सत्यमेव जयते

II.—Result of investigation into the causes of breakages of rails (with reference to the complaint from the Madras and Southern Mahratta Railway.)

On going into the matter I find that two of the cases of failure cited by the Madras and Southern Mahratta Railway which appear on page 430 of the Applications to the Tariff Board were investigated by the Metallurgical Inspector. These are Nos. 3 and 8. No. 7 was not investigated as the cause appeared to be the same as in case No. 8.

In case No. 3, the analysis of a piece of the fractured rail agreed with the analysis of the original heat. The cause of failure was found to be a flaw caused by a defect in the process of rolling. This has since been rectified.

In case No. 8, analysis and tests failed to show any defect either of composition or in rolling and no responsibility for the fracture lies with Tatas. Failure was due to a defect in making the crossing.

The remarks made by the Madras and Southern Mahratta Railway against cases 7 and 8 appear, therefore, to be erroneous. Case No. 9 appears to be of the same nature.

2. As the evident intention of the Board is to ascertain to what extent, if any, Tata's rails are inferior to British, I propose to deal briefly with the complaints which have been received from railways other than the Madras and Southern Mahratta Railway whose complaints have been referred to above.

(*a*) The Bengal Nagpur Railway on page 173, paragraph 5, say that the quality of the steel in Tata's rails is good but a few cases of rapid corrosion have been reported. Cases which have been investigated pointed to the rapid corrosion being due to causes other than the character of the metal. Nothing could be detected by examination to account for it and it is believed that Tata's rails are no more sensitive to atmospheric action than home rails. An extensive investigation on corrosion is now being undertaken.

(*b*) The Bombay, Baroda and Central India Railway on page 172 of the Blue Book refer to evidences of a slight flow of the metal of the head of Tata's rails when laid on the outside of curves, and add that similar results on home rails have only been noticed in one or two isolated cases. This complaint has also been made by other railways and must be regarded as being, to some extent, general. It is the effect of a slight decarbonization during rolling. Only the " skin " of the rail is affected. After the skin has worn off no further flowing of the metal should occur. Improvements have recently been made in manufacture and defects of this kind are now rare.

(*c*) *Complaint made to the Board by the Assam Bengal Railway.*—I find that only one case of failure has been reported to the Metallurgical Inspector. The conclusion reached was that the failure was not due to defects in analysis or rolling and that no responsibility lay with Tatas. The " scars " and " burning over " are in some cases rolling marks. These occur also in home rails. A few cases of " flaking " have been reported. The defect which is not a serious one is usually due to the soft skin already referred to. Only in one of the cases dealt with has the defect been due to other causes.

Every cause of complaint reported to the Metallurgical Inspector is fully investigated and action taken.

3. In April 1925 the Metallurgical Inspector addressed all Railways requesting opinions as to the quality of Tata's rails and fishplates, compared with those of British manufacture, particularly as regards wearing qualities. Copies of the Metallurgical Inspector's circular letter of enquiry and the replies received are attached together with a summary (Annexure A.)

In the reports reference is made to defects which I have already mentioned, but it will be noted that on the whole they are favourable and they indicate that there are no marked differnces in wearing qualities between British and Indian rails.

I also append copies of the reports on all complaints received for investigation from the 4th December 1923 together with a summary showing the results in each case (Annexure B).

4. Complaints regarding fishplates have been received from four Railways. I attach herewith (Annexure C) the reports on each case, and a summary showing the results of the investigations from which it will be seen that in the two cases where defects were found they were incorrect punching only. This cannot be regarded as serious, and it is evident that the position regarding fishplates manufactured by Tatas is very satisfactory.

5. From the attached statement (Annexure D) it will be seen that 435,600 tons of rails and 16,639 tons of fishplates have been passed for the various Railways during the past five years. The number of complaints received bears an exceedingly small relation to the quantities in use.

सत्यमेव जयते

ANNEXURE A.

Summary of replies received from Railways to Metallurgical Inspector's circular letter of enquiry dated the 18th April 1925.

1. C. I. C. R.	Insufficient data available.	(Letter No. 2.)
2. S. I. R.	Tata's rails not yet laid.	(Letter No. 3.)
3. A. B. R.	Not sufficient time for report.	(Letter No. 4.)
4 B. & N. W. R.	Very little wear at present visible.	(Letter No. 5.)
5. G. B. S. R.	Wear and tear same as those already in use.	(Letter No. 6.)
6. G. I. P. R.	Wearing properties of Tatas and English rails do not vary to any remarkable extent.	(Letter No. 7.)
7. B. N. R.	From District Engineer—Rather early for report, but not the slightest sign of unusual wear or distortion (41¼ lb.). D. E. Kharagpur.—No undue wear on rails. D. E. Colliery.—No sign of unusual wear. D. E. Chakradharpur.—Corroded slightly in tunnels. Skin peeling in a few rails. D. E. Adra.—Three rails head burring and 1 rail scalling on head.	(Letter No. 8.)
8. A. B. R.	41¼ lb. excellent condition (laid in 1913-14). 50 lb. several peculiarities. Pitting and rusting in tunnels. Soft skin. Samples requested by M. I.	(Letter No. 9.)
9. Burma Railways	No undue wear after 3 years compared with English rails.	(Letter No. 10.)
10. E. B. Railway	Age for Age Tata's rails compare quite favourably.	(Letter No. 11.)
11. E. I. Railway	Wearing properties of Tata's rails compare favourably with British products.	(Letter No. 12.)
12. Mysore Railways	41¼ lb. comparison favourable with British products. 60 lbs. subject to heavy wear. No difference at present with other makers.	(Letter No. 13.)
13. Nizam's G. S. Ry.	Not possible to detect wear by profiles, some slight burring a few rail flake but not to any serious extent.	(Letter No. 14.)

(Note.—See your letter I-4/79 of 27th May 1926 for further evidence.)
(Letter No. 15.)

In addition to the above the Bengal Nagpur Railway supplied to Metallurgical Inspector's office a report with regard to Tata's rails laid in 1926. Profile tracings were attached. The report states "if anything Tata's rails appear to wear slightly less than English rails." This report is the only one received which gives accurate measurements of the relative wear of English and Tata rails.

(Letter No. 16.)

ANNEXURE “ C.”

Summary of complaints received regarding Tata’s fishplates.

Railway.	Section.	Report No.	Nature of complaints.	Results of investigation.
M. and S. M. .	90 lb. B. S. (Shallow pattern).	No. 3/9/25, 24/7/26 & 24/3/23. “ A ”	Fracture of pairs of plates at joints.	No. defects in plates could be found. Three separate complaints were sent in, but no cause of failure could be found.
N. W. R. .	90 lb. various sections.	. . “ B ”	Numerous failures on fishplates of all makes.	Defect either in design of plates or defect in road.
M. and S. M. .	60 lb. .	No. 767 16/6/24 “ C ”	Incorrect punching.	Complaint justified.
O. and R. .	90 lb. I. S. R. section.	. . “ D ”	Incorrect punching.	The Assistant Metallurgical Inspector visited Lucknow and considered only 5 pairs unfit for service.

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ANNEXURE D.

Tonnage of passed Rails and Fishplates despatched during the period 1921-22 to 1925-26.

RAILS AND FISHPLATES DESPATCHED.

	1921-22.		1922-23.		1923-24.		1924-25.		1925-26.		TOTAL.	
	Rails.	Fish-plates.	Rails.	Fish-plates.	Rails.	Fish-plates.	Rails.	Fish-plates.	Rails.	Fish-plates.	Rails.	Fish-plates.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Aden Ry.	100	4	..	..	116	5	..	..	..	..	216	9
A. R. T. Co., Ltd. . .	785	31	386	31	1,115	6	737	61	..	..	3,073	129
A. B. Ry.	..	3	..	..	..	..	2,468	52	3,180	78	5,668	133
Burn & Co.	..	..	..	..	88	..	62	..	138	12	288	12
Burma Ry.	8,115	247	3,772	120	4,085	151	9,494	304	8,513	298	33,979	1,118
Baroda S. Ry.	..	6	..	..	..	..	..	..	..	..	..	6
B. N. W. Ry.	2,559	223	5,168	116	4,378	117	5,354	232	4,450	225	21,909	913
B., B. and C. I. Ry. . .	4,366	643	5,610	437	8,426	420	9,638	228	20,022	921	48,062	2,649
B. N. Ry.	4,329	752	8,009	280	19,514	321	14,581	4	8,214	..	64,647	1,357
Bombay Imp. Trust . .	..	..	..	..	163	5	..	..	..	..	163	5
Bikaneer S. Ry.	..	..	..	..	..	..	..	..	1,414	57	1,414	57
C. I. C. F. Ry.	..	..	..	..	..	..	1,097	..	4,962	485	6,059	485
Cal. R. Turf Club .	..	..	..	..	..	..	..	..	134	7	134	7
D. H. Ry.	..	..	..	..	..	..	..	..	9	..	9	..
Delhi New Cop. . . .	..	..	1,020	17	702	75	..	..	..	..	1,722	92

E. B. Ry.	5,351	294	3,306	134	2,991	76	351	99	12,260	173	24,259	776
E. I. Ry.	..	..	..	..	..	..	21,260	614	2,004	170	23,264	784
Gondal Ry.	..	3	..	..	..	..	..	..	..	..	..	3
G. I. P. Ry. . . .	373	..	..	..	..	..	..	..	9,904	331	10,277	331
Gwalior L. Ry. . . .	..	..	18	1	..	..	..	..	..	..	18	1
G. B. S. Ry. . . .	..	..	..	..	..	..	93	..	43	2	136	2
M. and S? M. Ry. . . .	7,609	260	6,724	199	6,881	214	19,961	511	17,807	608	58,982	1,792
Martin & Co. . . .	560	44	..	..	74	..	582	59	450	26	1,666	129
Mysore Ry.	..	9	966	53	169	8	..	..	..	..	1,135	70
McLeod & Co. . . .	..	..	..	..	..	..	..	..	55	2	55	2
N. G. S. Ry. . . .	2,000	60	2,700	55	1,538	69	3,394	83	..	..	9,632	267
N. W. Ry.	18,736	903	17,375	490	24,886	1,053	12,591	835	18,474	1,163	92,062	4,444
O. and R. Ry. . . .	4,474	177	6,327	339	5,069	176	4,899	201	..	19	20,769	912
R. and K. Ry. . . .	..	..	186	..	..	..	..	..	..	..	186	..
S. I. Ry.	..	..	..	..	..	..	2,260	..	3,558	154	5,818	154
TOTAL .	69,357	3,659	61,567	2,272	80,195	2,696	1,08,892	3,283	1,15,591	4,729	4,35,602	16,639

III.—Note on the capacity of wagon building firms in India, including Messrs. Jessop and Company's structural works at Jamshedpur.

The position of wagon building firms is as follows:—

(1) *Indian Standard Wagon Company, Asansol.*

At the beginning of 1924 and for some months afterwards these works were shut down for want of orders. At this stage the manufacturing plant was not well balanced but arrangements had been made to supply the deficiencies as soon as an order was received. In July of that year we estimated that the production of finished wagons could not take place till February 1925. Orders for 225 C-2 type wagons for delivery during 1924-25 and 1025 for delivery during 1925-26 were placed by the East Indian Railway in July 1924 and additional machinery was installed. Fifty wagons were completed and passed in February 1925 and the total number, 1250, was completed in March 1926.

The maximum outturn per mensem during this period was 185 and the monthly average during the period March to August 1925 was 158 wagons. The average during the whole period of the contract would be misleading because the work was purposely slowed down owing to lack of further orders to keep the erecting shops working at full capacity. The next orders for 1426 C type wagons were only placed in January this year. Deliveries on these orders commenced in June this year.

I estimate the present capacity of this works to be

2,400 wagons C-2 type or
2,000 wagons A-2 type.

(2) *Messrs. Burn and Company, Howrah.*

At the beginning of the financial year 1924-25 carriage underframes for the Eastern Bengal and Oudh and Rohilkhand Railways were under construction, and some converted American wagons were being erected. Orders were placed by the East Indian Railway with this firm in July that year for 180 A-2 type wagons for delivery within the financial year and 370 A-2 type wagons for delivery during the year 1925-26. Deliveries commenced in February 1925 and the two orders totalling 550 wagons were completed in November 1925.

Taking a carriage underframe as equivalent to two covered goods wagons the maximum and average outturns in terms of wagons during this period were 109 and 76 respectively.

During this period a number of additional machines was installed and the capacity for wagon building has increased slightly, but the works cannot be said to have developed to any marked degree as a wagon building concern. This firm has on hand at present 1,000 A-2 type wagons ordered in January of this year. Deliveries have not yet started on these orders.

I estimate this firm's present capacity per annum for building wagons to be as follows:—

(*a*) 1,200 A-2 type wagons if no carriage underframes are in hand, or
(*b*) 800 A-2 type wagons, and 200 carriage underframes.

(3) *Peninsular Locomotive Company, Tatanagar.*

In 1924 these works were not completed. Buildings had been erected or partially completed and some machinery received, but everything was in a state of suspended activity no orders having been received. Towards the end of the year preparations were started for putting the works in a position to undertake wagon building.

An order for 500 A-2 type wagons for the Great Indian Peninsula Railway was received in October 1924 for completion during the financial year 1924-25, but production did not commence till October 1925 when twenty wagons were completed. A further order for 480 A-2 type wagons for the Great Indian Peninsula Railway for completion during 1925-26 was received in October 1925. Production has increased steadily and during April, May and June this year the average monthly outturn has been 63 wagons. It is probable that the rate of production will increase still further and I estimate that with efficient management the works should be capable of turning out 900—1000 A type wagons per annum.

(4) *Messrs. Jessop and Company.*

This firm also had no wagon orders in hand in the early months of 1924. Simultaneously with Messrs. The Indian Standard Wagon Company and Burn and Company an order was placed in July 1924 for 140 A-2 type wagons for the East Indian Railway for completion by the end of the financial year and 160 similar wagons for completion during 1925-26. It was decided to build these at their Tatanagar Structural Works. These works are not laid out with special plant for wagon building and the components were made either by their Howrah works, or by other firms in India or by firms outside India.

Production commenced in March 1925 and the orders were completed in December that year. The maximum and average monthly outturns were 55 and 30 wagons respectively. During this period cariarge underframes were being built at their Garden Reach Works which brought up the total average production in terms of wagons to 47.

Orders for 143 A-2 type wagons for the East Indian Railway and 351 A-1 type wagons for the North Western Railway placed in January of this year are now in hand. Delivery of finished wagons has not yet commenced.

Such fabrication as has been carried out by this firm themselves has been done with machinery to be found in a general engineering works; the works have not been equipped with special plant for wagon building. The Garden Reach Works has now been given up and the plant is being re-erected at Dum Dum. This works is expected to be in a position to commence wagon erection work towards the end of the year and wagon work will normally be concentrated there.

In view of the present state of transition, I find some difficulty in giving a reliable estimate of production for this firm, but it is believed that they will be able to deal with 600 A-2 type wagons per annum.

Messrs. Jessop & Co.'s works at Jamshedpur are not laid out for wagon fabrication or erection. The works were erected originally to fabricate the steelwork for Tata's works extensions. After the completion of this work it was decided to retain them, at all events temporarily for bridge and steel structural work generally. In carrying out at these works an order for wagons the bulk of the components obtained in India were made either at their Howrah or Garden Reach Works, the work at Jamshedpur being largely confined to erection. For this purpose lines outside the workshop proper were utilized. There were no power handling appliances over these lines. Cutting and drilling some of the frame and body sections and plates were done at Jamshedpur and assembling and riveting carried out.

It is the intention of the firm to build wagons principally at the new works at Dum Dum but if necessity arises the works at Jamshedpur will also be used.

In order that the estimates I have given may not be misleading it is perhaps desirable I should make it clear that the figures given are for the steady production of the single type of wagon indicated or a similar type. Orders are now usually allotted so that each works are able to concentrate on a single type, but hitherto firms have not as a rule been able to secure orders at such suitable intervals as to keep the works continuously occupied in all departments either at full or at a lower rate of production. For this reason it will therefore be found that the actual production has fallen considerably below the estimates I have given.

I.—Statement showing the progress of Manufacture of Wagons

Contractors.	Date of contract.	Date of completion.	No. of wagons.	Type.	Railway.
Burn & Co. . . .	28th May 1923	31st Mar. 1924	33	B. G. I. R. C. A. Carriage Underframe and Bogies complete.	N. W.
Ditto . . .	5th Jan. 1921	Dec. 1922	10	B. G. Petrol Tank Wagons.	E. B.
Ditto . . .	11th Sept. 1922.	31st Mar. 1924	83	Low-sided Wagons 45′ long	N. W.
Ditto . . .	5th Jan. 1921	31st Mar. 1924	200	A-1 type . . .	N. W.
Ditto . . .	11th Feb. 1924	31st Mar. 1925	53	B. G. Carriage Underframe and Bogie.	E. B.
Ditto . . .	13th May 1924	31st Mar. 1925	53	B. G. Carriage Underframe with 106 Bogies.	O. and R.
Ditto . . .	12th Aug. 1920	No fixed date.	424	High-sided American Wagons on Underframes.	E. I.
Indian Standard Wagon Co.	5th Jan. 1921	31st Mar. 1924	300	A-1 type C. G. Wagons .	N. W.
Ditto . . .	12th Aug. 1920	No fixed date.	1326	High-sided American Wagons on Underframes.	E. I.
Jessop & Co. . . .	4th Mar. 1921	30th Nov. 1923	100	M. A-1 type M. G. Wagon	M. and S. M.
Ditto . . .	8th Dec. 1923	28th Feb. 1924	500	A-1 type C. G. Wagon .	E. I.

* Balance completed
† Balance completed.

under inspection of Controller of Inspection, Calcutta Circle.

1924												1925
Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
10*	10	12	*Completed in March 1924.*									
..	..	9	1	Completed in April 1924.								
..	..	9	13	11	Completed in May 1924.							
51*	39	10	*Completed in March 1924.*									
..	..	..	..	..	..	..	..	11	3	10	4	3†
..	..	..	..	..	..	..	..	..	9	5	11	13†
..	243	..	..	..	16	47	65	13	11	20	9	Completed in Dec. 1924.
50*	50	26	Completed in March 1924.									
10*	24	Completed in February 1924.										
20*	62	Completed in February 1924.										
313*	114	5	Completed in March 1924.									

in 1923.
in 1925; *vide* Statement II.

II.—Statement showing the Progress of Manufacture of Wagons

Contractors.	Date of contract.	Date of completion.	No. of wagons.	Type	Railway.	1924-25.	
						February.	March.
Peninsular Locomotive Co.	25th Oct. 1924.	31st Mar. 1926	500	A2 . . .	G. I. P. .	—	—
Ditto . .	15th Oct. 1925.	13th Aug. 1926	480	A2 . . .	E. I. .		Notyet
Jessop & Co. Jamshedpur	24th July 1924.	140 by 13th Mar. 1926 and Bal. in 1925-26.	300	A2 . . .	E. I. .	—	45
Jessop & Co., Garden Reach.	24th Mar. 1924.	31st Mar. 1925	85	B. G. Bogie Carriage Underframe.	N. W. .	—	7
Jessop & Co., Garden Reach.		494	143	A2 . . .	E. I. .		Notyet
Jessop & Co., Jamshedpur.			351	A1 . . .	N. W. .		
Indian Standard Wagon Co.	24th July 1924.	230 by 21st Mar. 1925 and Bal. in 1925-26.	1250	C2 . . .	E. I. .	50	180
Ditto . .	12th Dec. 1925.	13th Mar. 1926 425	320	C2 . . .	E. I. .	—	—
			30	C2 . . .	S. I. .	—	—
			75	C2 . . .	M. and S. M.	—	—
		1750	112	C2 . . .	N. W. .		Notyet
			429	C2 . . .	G. I. P. .		
			40	C2 . . .	S. I. .		
			324	C3 . . .	N. W. .		
			845	C2 . . .	E. I. .	—	—
Burn & Co. . .	24th July 1924.	185 by 13th Mar. 1925 and Bal. in 1925-26.	550	A2 . . .	M. and S. M.	30	102
Ditto . .	11th Feb. 1924.	31st Mar. 1925	53	B. G. Bogie Carriage Underframe.	E. B. .	6*	3
Ditto . .	..	..	10	B. G. Bogie Carriage Underframe 2′—6″.	S. and S. L.	—	—
	..	..	20	Bogie covered Goods Wagons 2′—6″ Gauge.	Do. .	—	—
Ditto . .	22nd July 1925.	To be completed within 23 weeks from the date of acceptance of Tender.	26	B. G. 4 wheeled Carriage Underframe.	E. B. .	—	—
Ditto . .	30th Mar. 1926.	Delivery to start from 31st Dec. 1925 at 12 per month.	137	Bogie Carriage Underframe B. G.	E. I. .	—	—
		1000	127	A2 . . .	E. I. .	—	—
			428	A2 . . .	G. I. P. .		Notyet
			375	A2 . . .	B. B. & C. I.		
			70	A2 . . .	S. I. .		
Ditto . .	13th May 1924.	31st Mar. 1925	53	B. G. Carriage Underframe with 106 Bogies.	O. and R. .	6*	9

* Balance completed in

under inspection of Controller of Inspection, Calcutta Circle.

1925-26.												1926-27.		
April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April.	May.	June.
..	..	..	..	..	..	20	30	33	32	40	60	72	53	60 Balance 100
started.														
28	27	30	40	20	30	35	25	20	Completed on 22nd Dec. 1925.					
12	12	12	12	10	8	9	3	Completed on 23rd Nov. 1925.						
started.														
125	130	185	160	170	140	110	Completed on 20th Oct. 1925.							
..	..	..	..	..	..	..	130	100	50	39	1	Completed on 9th Mar. 1926.		
..	..	..	..	..	..	..	..	..	..	..	30	Completed on 6th Mar. 1926.		
..	..	..	..	..	..	..	..	..	50	25	Completed on 26th Feb. 1926.			
started.														
..	..	..	..	..	..	..	..	..	..	..	..	..	..	142
45	85	82	85	71	30	16	4		Completed on 7th Nov. 1925.					
9	4	Completed on 27th May 1925.												
4	6	Completed on 14th May 1925.												
..	..	..	..	19	1	Completed on 8th Sep. 1925.								
..	..	..	..	..	1	23	2	Completed on 7th Nov. 1925.						
..	..	..	..	..	..	..	..	..	10	25	33	22	44	3 completed on 21st June 1926.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	48
started.														
Completed in March 1925.														

1924 *vide* Statement I.

IV.—Note on the percentage of materials and component parts of local manufacture used by wagon building works in India.

As requested I attach statements showing the various components required in the building of A-2 type wagons and the source from which these were obtained by Messrs. Jessop and Company, Messrs. Burn and Company and Messrs. The Peninsular Locomotive Company, and also those required for the C-2 type wagons built by the Indian Standard Wagon Company.

It will be understood that a correct percentage fabrication carried out in India cannot be obtained from the arithmetical proportions of components made in India and those obtained from abroad, because the value of the components varies greatly (*cf.* items 9, 10, 11 and 12 of list 1 with items 107, 109, 110 and 114).

I am endeavouring to obtain the cost of the various items so that a clearer idea of the position is possible. It is evident, however, from the lists that a substantial proportion of fabrication is carried out on these wagons by Indian firms.

J. S. PITKEATHLY.

The 9th August 1926.

सत्यमेव जयते

Statement of material used in construction of 300 A-2 type wagons by Messrs. Jessop & Co. against E. I. Railway order (contract dated 24th July 1924).

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
1	8	Brackets for securing chainless cotter.	...	India.	
2	4	Chainless cotter . . .	220	980	
3	4	Washer for packing do. .	...	India.	
4	4	Snap head bolts . . .			
5	4	½″ dia. Hex. nuts for do. .			
6	4	Chainless cotter . . .	England .	...	
7	8	Snap head bolts . . .	...	India.	
8	8	⅝″ dia. Hex. nuts for do. .			
9	2	Label holder . . .			
10	2	,, flap cover . .			
11	2	,, ,, hinges			
12	2	,, pin . . .			
13	4	Swing door hook . . .			
14	4	Eye for do. . . .			
15	4	Eye for do. . . .			
16	4	Washer for do. . . .			
17	6	Swing door bolt guides . .			
18	1	Hand hold			
19	2	Pin for swing door bolt .			
20	2	Swing door bolt . . .			
21	2	,, ,, eye bolt . .			
22	2	,, ,, frame . .			
23	2	,, ,, ,, . .			
24	2	,, ,, plate . .	110	490	

सत्यमेव जयते

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
25	2	Swing door plate . . .	110	490	
26	2	„ „ striking plate .	...	India.	
27	4	„ „ packing plate .			
28	2	Flap door frame . . .			
29	2	„ plate . . .			
30	4	„ side hinge . .			
31	2	„ centre hinge .			
32	8	Swing door hinge . . .			
33	14	Door hinge pin . . .			
34	14	Split pin for do. . .	England .	...	
35	4	Door sealing plate . .	...	India.	
36	2	End roof plate . . .	110	490	
37	2	Inter roof plate . . .	110	490	
38	2	Ditto . . .	110	490	
39	1	Centre roof plate . . .	55	245	
40	2	End top body plate . .	110	490	
41	2	„ centre body plate . .	110	490	
42	2	„ bottom body plate . .	110	490	
43	4	Side top body plate . .	220	980	
44	4	„ bottom body plate . .	...	India.	
45	4 R.&L.	Corner stanchion angle . .			
46	4 R.&L.	End inter stanchion bulb angle			
47	2	End centre do. .			
48	8 R.&L.	Side inter stanchion angle .			
49	4	Door striking plate (side) .			

सत्यमेव जयते

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
50	4 R.&L.	Side door stanchion angle .	...	India.	
51	2	Floor plate			
52	1	Ditto . . .			
53	4	Packing plate for corner stanchion.			
54	6	Stanchion joint plate .			
55	4	End inter stanchion gusset .			
56	2	„ centre „ „ .			
57	4	Floor plate . . .			
58	2	Ditto			
59	2	Door top angle . . .			
60	2	„ striking plate (top) .			
61	2	Roof angle and centre stanchion.			
62	4	Roof angle and inter stanchion			
63	4	Butt strap for floor plates .			
64	2	End stanchion joint plate .			
65	2 R.&L.	Headstock channel . .			
66	2 R.&L.	Solebar channel . . .			
67	4 R.&L.	Longl. channel . . .			
	2 R.&L.	Ditto . . .			
68	2 R.&L.	Curb rail angle . . .			
69	2	Solebar and headstock gusset plate.			
70	2	Crossbar channel . . .			

सत्यमेव जयते

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
71	12 R.& L.	Body brackets, plate . .	England	...	
72	4 R.&L.	Diagonal (pressed plate) .			
73	2	Drawbar trimmer channel .	...	India.	
74	2	Double knee for trimmer .			
75	16	Underframe knee angle . .			
76	4	Headstock and solebar knee angle.			
77	4 R.&L.	Solebar and crossbar gusset .			
78	2	Longl. crossbar and diagonal gusset.			
79	4	Knee for trimmer angle .			
80	4	Solebar stiffening bracket .	320	880	
81	8	Packing plate for diagonal .	...	India.	
82	4	Axle-guard plate . . .			
83	8	Horn checks . . .			
84	4	Axle-guard bridle flats . .			
85	8	Scroll iron			
86	16	Spring shackles . . .			
87	16	„ fins			
88	16	„ cotters . . .			
89	4	Packing piece between solebar and scroll iron (end).			
90	4	Packing piece between solebar and scroll iron (middle).			
91	8	Axle-guard bridle stud . .			
92	8	„ „ nut . .			
93	2	Drawbar hook . . .	England .	...	

सत्यमेव जयते

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
94	4	Spindle for draw spring	...	India.	
95	4	Hex. nuts for do.	320	880	
96	4	Split cutter for do.	...	India.	
97	4	Washers for springs			
98	4	Spring shackles			
99	2	Drawbar pin			
100	2	Split cutter for spring			
101	2	Solid cutter for do.			
102	4	Spring spindle headless pin			
103	4	Split cutter for do.			
104	4	Solid cutter for do.			
105	2	Drawbar inside wearing angle			
106	2	„ face plate			
107	2	Screw coupling complete with shackle and pin, etc., as per drawing.	England	...	
108	2	Suspender Hook	...	India.	
109	4	Buffers complete with all washers as per drawing.	England	...	
110	4	Laminated Bearing Spring complete 13 plates 4″ × ½″ × 3′-6″ centres of eyes where straight.			
111	12	Buffer and Draw Springs			
112	4	„ Recoil Springs			
114	4	Axle Boxes complete with Bearings, etc.			
115	1	Hand Brake Clutch	...	India.	
116	1	Vertical Lever Bracket			

सत्यमेव जयते

Item.	No. per set.	Description.	Where manufactured. Home.	Where manufactured. India.	Remarks.
	Complete.				
117	4	Vertical Lever . . .	...	India.	
118	1	Brake Shaft . . .			
119	1	,, ,, Lever (Short) .			
120	1	,, ,, ,, (Long) .			
121	2	Key for Brake Shaft Levers .			
122	1	,, ,, ,, . .			
123	1	Pin ,, ,, Lever .			
124	1	Washer ,, ,, .			
125	1	Split pin for ,, ,, .	England .	...	
126	1	Collar for Brake Shaft .	...	India.	
127	1	,, ,, ,, .			
128	1	Split pin for do. .	England .	...	
129	1	Do. do.	...	India.	
130	1	Vertical Lever Bracket . .			
131	1	Trimmer for do. Angle . .			
132	2	Vertical Lever Hanger .			
133	1	Cylinder carrier Packing Block			
134	4 R. &L.	Brake Block Hanger Bracket .			
135	2	Brake Beam . . .			
136	4	Hex. nuts for Brake Beam .	England .	...	
137	4	Split pin for do. .			
138	4	Spring Washers for do. .			
139	2	Cylinder carrier . . .	...	India.	
140	4	Brake Block Hanger . .			
141	2	Rivet for Brake Shaft Arm .			

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
142	2	Washer for Revet for Brake Shaft Arm.	...	India.	
143	4	Brake Beam Safety Hanger			
144	2	Short Pull Rod			
145	12	Vertical Lever Bush			
146	1	Hand Brake Adjuster			
147	1	Pad for do.			
148	1	Wing nut for do.			
149	1	Hand Brake Lever			
150	1	„ „ „ Chainless Pin.			
151	2	Brake Shaft Hanger			
152	1	Pull Rod			
153	1	Connecting Rod			
154	1	Brake Rack	England	...	
155	2	„ Shaft Push Rod	440	160	
156	2	Dummy Plug Carrier	440	160	
157	2	Connecting Rod Safety Hanger	440	160	
158	4	Train Pipe Clip	...	India.	
159	2	Pull Rod Pin			
160	2	Washer for do.			
161	2	Split pin for do.	England	...	
162	4	Brake Block	...	India.	
163	4	„ „ Hanger bolt			
164	4	Hex. nut for do.			
165	4	Split pin for do.	England	..	
166	1	Vertical Lever Hanger bolt	...	India.	
167	1	Hex. nut for do.			
168	1	Split pin for do.	England	...	

सत्यमेव जयते

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
169	1	Washer for Vertical Lever Hanger bolt.	...	India.	
170	2	Vertical Lever Hanger bolt .			
171	2	Hex. nut for do. .			
172	2	Washers for do. .			
173	2	Split Pin for do. .	England .	...	
174	1	Vibrator Hanger . . .	...	India.	
175	1	Ferrule for do. . . .			
176	2	Pull rod adjusting pin . .			
177	2	Washer for do. . .			
178	2	Split cotter for do. . .			
179	1	Vertical Lever Bracket Pin .			
180	1	Washer for do. .			
181	1	Split pin for do. .	England	...	

सत्यमेव जयते

Statement of material used in construction of 550 A.-2. type wagons by Messrs. Burn & Co., against Controller of Stores, E. I. Railway, Order No. 5417, dated 8/9th August 1924.

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
1	8	Brackets for securing chainless cotter.	England.	...	
2	4	Chainless cotters . . .			
3	4	Washers for packing do.			
4	4	Snap head bolts . . .			
5	4	½" dia. Hex. nuts for do. .	16	2184	
6	4	Chainless cotter . .	England .	...	
7	8	Snap head bolts . .	...	India.	
8	8	⅝" dia. Hex. nuts for do.	England .	...	
9	2	Label holder . . .	...	India.	
10	2	„ „ Flap Cover .			
11	2	„ „ „ „ Hinges			
12	2	„ „ Pin . . .			
13	4	Swing door hook . . .	England.	...	
14	4	Eye for do. . .			
15	4	Eye for do. . .			
16	4	Washer for do. . .			
17	6	Swing door bolt guides .			
18	1	Hand hold			
19	2	Pin for swing door bolt .			
20	2	Swing door bolt . . .			
21	2	Swing door eye bolt . .			
22	2	Swing door frame . .			
23	2	Ditto . .			
24	2	Sewing door plate . .			
25	2	Ditto .			

सत्यमेव जयते

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
26	2	Swing door striking plate	England	...	
27	4	Swing door packing plate			
28	2	Flap door frame			
29	2	Flap door plate			
30	4	Flap door side hinge			
31	2	Flap door centre hinge			
32	8	Swing door hinge			
33	14	Door hinge pin			
34	14	Split pin for do.			
35	4	Door sealing plate			
36	2	End roof plate	8	1072	
37	2	Inter roof plate	...	India.	
38	2	Ditto			
39	1	Centre roof plate			
40	2	End top body plate			
41	2	End centre body plate			
42	2	End bottom body plate			
43	4	Side top body plate			
44	4	Side bottom body plate			
45	R&L4	Corner stanchion angle			
46	R&L4	End inter stanchion bulb angle.			
47	2	End centre stanchion bulb angle.			
48	R&L8	Side inter stanchion angle			
49	4	Door striking plate (Side)	England	...	
50	R&L4	Side door stanchion angle (in 4 sheets).	...	India.	
51	2	Floor plate			
52	1	Ditto			

सत्यमेव जयते

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
53	4	Packing plate for corner stanchion.	...	India.	
54	6	Stanchion joint plate . .			
55	4	End inter stanchion Gusset .			
56	2	End centre „ „			
57	4	Floor plate . . .			
58	2	Ditto			
59	2	Door Top Angle . .			
60	2	Door striking plate (top) .			
61	2	Roof angle and centre stanchion.			
62	4	Roof angle and inter stanchion.			
63	4	Butt strap for floor plates .			
64	2	End stanchion joint plate .			
65	2 R& L	Headstock channel . .			
66	2 R& L	Solebar channel . . .			
67	4 R& L	Longl. channel . . .			
68	2 R& L	Ditto . . .			
69	2 R& L	Curb rail angle . . .			
70	2	Solebar and headstock gusset plate.			
71	2	Crossbar channel . . .			
72	12 R &L	Body brackets, plate . .			
73	4 R& L	Diagonal (Pressed plate) .			
74	2	Drawbar trimmer channel .			
75	2	Double knee for trimmer .			

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
76	16	Underframe knee angle	...	India	
77	4	Headstock and solebar knee angle.			
78	4 R& L	Solebar and crossbar Gusset			
79	2	Longl crossbar and diagonal gusset.			
80	4	Knee for trimmer angle	2184	16	
81	4	Solebar stiffening bracket	16	2184	
82	8	Packing plate for diagonal	...	India.	
83	4	Axle-guard plate			
84	8	Horn checks			
85	4	Axle-guard bridle flats			
86	8	Scroll iron			
87	16	Spring shackles			
88	16	Spring fins			
89	16	Spring cotters			
90	4	Packing piece between solebar and scroll iron (end).			
91	4	Packing piece between solebar and scroll iron (middle).			
92	8	Axle-guard bridle stud			
93	8	Do. nut			
94	2	Drawbar hook	England	...	
95	4	Spindle for draw spring			
96	4	Hex. nuts for draw spring			
97	4	Split cutter for draw spring			
98	4	Washers for springs			
99	4	Spring shackles	...	India.	
100	2	Drawbar pin			
101	2	Split cutter for spring			
102	2	Solid cutter for spring			

Item	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
103	4	Spring spindle, headless pin	...	India.	
104	4	Split cutter for headless pin			
105	4	Solid cutter for headless pin			
106	2	Drawbar inside wearing angle			
107	2	Drawbar face plate			
108	2	Screw coupling, complete with shackle and pin, etc., as per drawing.			
109	2	Suspender hook			
110	4	Buffers, complete with all washers as per drawing.			
111	4	Laminated bearing spring, complete, 13 plates 4″ × ½″ × 3′ 6″ centres of eyes where straight.	England.	...	
112	12	Buffer and draw springs	Supplied by Railway.	...	
113	4	,, recoil springs			
114	4	Axle boxes, complete with bearings, etc.	England		
115	1	Hand brake clutch	...	India.	
116	1	Vertical lever bracket, complete			
117	4	Vertical lever			
118	1	Brake shaft			
119	1	,, ,, Lever (short)			
120	1	,, ,, ,, (long)			
121	2	Key for brake shaft levers			
122	1	,, ,, ,, ,,			
123	1	Pin for brake shaft lever			
124	1	Washer ,, ,, ,,			
125	1	Split pin for ,, ,,	England.	...	
126	1	Collar for brake shaft	...	India.	
127	1	Ditto			

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
128	1	Split pin for brake shaft .	England .	...	
129	1	Ditto			
130	1	Vertical lever bracket . .	...	India.	
131	1	Trimmer for lever angle .			
132	2	Vertical lever hanger . .			
133	1	Cylinder carrier packing block			
134	4 R.& L.	Brake block hanger bracket			
135	2	Brake beam . . .			
136	4	Hex. nuts for brake beam .	England .	...	
137	4	Split pin for do. .			
138	4	Spring washers for brake beam			
139	2	Cylinder carrier . . .	...	India.	
140	4	Brake block hanger . .			
141	2	Rivet for brake shaft arm .			
142	2	Washer for do.			
143	4	Brake beam safety hanger .			
144	2	Short pull rod . . .			
145	12	Vertical lever bush . .			
146	1	Hand brake adjuster .			
147	1	Pad for do. . .			
148	1	Wing nut for do. .			
149	1	Hand brake lever . .			
150	1	" " " chainless pin.			
151	2	Brake shaft hanger . .			
152	1	Pull rod			
153	1	Connecting rod . . .			

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Item,	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
154	1	Brake rack	...	India.	
155	2	Brake shaft push rod			
156	2	Dummy plug carrier			
157	2	Connecting rod safety hanger			
158	4	Train pipe clip			
159	2	Pull rod pin			
160	2	Washer for do.			
161	2	Split pin for do.	England	...	
162	4	Brake block	...	India.	
163	4	„ „ hanger bolt	64	2136	
164	4	Hex. nut for do.	80	2120	
165	4	Split pin for do.	80	2120	
166	1	Vertical lever hanger bolt	20	530	
167	1	Hex. nut for do.	20	530	
168	1	Split pin for do.	20	530	
169	1	Washer for do.	20	530	
170	2	Vertical lever hanger bolt	40	1060	
171	2	Hex. nut for do.	40	1060	
172	2	Washers for do.	40	1060	
173	2	Split pin for do.	40	1060	
174	1	Vibrator hanger	4	546	
175	1	Ferrule for do.	...	India.	
176	2	Pull rod adjusting pin			
177	2	Washer for do.			
178	2	Split cutter for do.	England		
179	1	Vertical lever bracket pin	...	India.	
180	1	Washer for do.	4	546	
181	1	Split pin for do.	England	...	

Statement of material used in construction of 1250 C2 type wagons by the Indian Standard Wagon Co. against Controller of Stores, East Indian Railway, Order No. 5642, dated 15th August 1924.

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
1	2	Solebars	...	India.	
2	2	Headstocks			
3	4	Longitudinals			
4	2	"			
5	2	Crossbars			
6	2	Drawbars Trimmers			
7	4	Corner Stanchions			
8	2	Curb Rails			
9	1	Vertical Lever Bracket Trimmers.			
10	2	Coping Angle Side			
11	2	" " end			
12	2	Floor " "			
13	1	Brake Rack	1140	110	
14	2	Drawbar Inside Wearing Angles.	...	India.	
15	8	Side Stanchion Inter			
16	4	Door Stanchion			
17	4	" Top Stiffeners			
18	16	Underframe knees			
19	4	Knee for Trimmer			
20	4	Headstock and Solebar Knee Outside.			
21	4	Longitudinal Crossbar and Diagonal Knee.			
22	4	End Stanchion			
23	8	Axle Guard Horn Cheeks			

सत्यमेव जयते

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
24	1	Vacuum Brakework	Home		
25	4	Axlebox bearings			
26	4	Axlebox stud Washers ($\frac{5}{8}''$ Single coil).			
27	...	Axleboxes			
28	4	Break Beams			
29	...	Paint, Linseed Oil, Coal Tar	...	India.	
30	4	Diagonals			
31	2	Label Holders			
32	2	" "			
33	2	" "			
34	16	Spring Shackle Pin Cotter			
35	12	Tarpaulin Cleats			
36	12	Packing Plate for Inter Stanchions.			
37	2	Pull Rod Adjusting Pin Cotter			
38	4	Dust Shield Cover Plates	Home	...	
39	4	Buffer Cotter	...	India.	
40	6	Split Cotters for Headless Pins.			
41	4	Cotter for Drawbar Spring Spindles.			
42	4	Packings between Sole and Scroll Irons.			
43	4	Ditto			
44	2	Solebar and Headstock Gusset Plate.			
45	4	Solebar and Crossbar Gusset			
46	2	Longitudinal Crossbar and Diagonal Gusset.			
47	2	End Plates			

सत्यमेव जयते

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
48	4	Packing Plate for Corner Stanchions.	...	India.	
49	2	Plate over side Door . .			
50	4	Side Plates . . .			
51	2	Door Plates	Home .	...	
52	4	Coping Angle-Gussets . .	...	India.	
53	4	Butt Strip for Floor Plate .			
54	4	Door Packing Plates .	Home	...	
55	2	" " " . .			
56	4	Floor Plate O . . .	...	India.	
57	2	" " P. . . .			
58	2	" " R. . . .			
59	1	" " S. . . .			
60	2	Gib Cotters for Drawbar .			
61	4	" " " " . .			
62	12	Body Brackets . . .			
63	2	" " Centre . .			
64	4	Door Arrester Lever Arm Brackets.	Supplied by Railway.		
65	8	Door Arrester Shackle Plates .			
66	2	Bridge Section Over Door .	...	India.	
67	2	Double Knee for Trimmer .			
68	4	Door Arrester Lever Plates	Supplied by Railway.		
69	2	Brake Shaft Hanger . .	...	India.	
70	4	Headstock, Solebar and Diagonal Knee.			
71	4	Axlebox Dust Shields . .	Home	...	
72	1	Washer for Handbrake Lever Chain, Pin.	500	750	
73	5	Door Handles . . .	2500	3750	

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
74	1	Vibrator Hanger . . .	500	750	
75	1	Pull Rod D. . .	500	750	
76	1	Connecting Rod . .	500	750	
77	8	Hinge Pins . . .	Home .	...	
78	1	Handbrake Lever Chainless Pin.	500	750	
79	12	Special Rivets for Chain Cotter for Securing Door.	...	India.	
80	4	Axlebox Face Plate Studs .	Home	...	
81	4	Ditto . .			
82	2	Suspender Hooks . .	1000	1500	
83	4	Buffer Nuts . . .	...	India.	
84	4	Brake Beam Nuts . .	Home .	...	
85	2	Rivets for Brake Shaft Arm .	...	India.	
86	4	Door Arrester Eyebolts . .	Supplied by	Railway.	
87	6	Chainless Cotter for securing Flap Door.	3000	4500	
88	1	Brake Shaft Cotter, Small .	500	750	
89	1	" " " Large .	500	750	
90	1	Vertical Lever Bracket F .	500	750	
91	2	Door Arrester Spring Washers	Supplied by	Railway.	
92	1	Handbrake Clutch . .	500	750	
93	2	Brake Shaft Bushes . .	1000	1500	
94	4	Drawbar Spring Washers .	2000	3000	
95	1	Brake Shaft . . .	500	750	
96	4	Buffer Head and Shank .	...	India.	
97	16	Spring Shackles . . .	8000	12000	
98	2	Short Pull Rods . . .	1000	1500	
99	2	Cylinder Carriers . . .	1000	1500	
100	4	Buffer Middle Washers . .	Supplied by	Railway.	

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Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
101	2	Connecting Rod Safety Hangers.	1000	1500	
102	2	Brake Shaft Keys . .	1000	1500	
103	1	,, ,, ,, .	...	India.	
104	4	Brake Beam Safety Hangers .	2000	3000	
105	4	Train Pipe Clips . . .	2000	3000	
106	4	Door Arrester Swivel Stop Plate.	Supplied by	Railway.	
107	2	Door Frames . . .	...	India.	
108	1	Vertical Lever Bracket C .	500	750	
109	2	Vertical Lever Hanger . .	1000	1500	
110	4	Bridles	2000	3000	
111	4	Vertical Levers . . .	2000	3000	
112	4	Brake Block Hanger Bracket, Back plate.	...	India.	
113	4	Brake Block Hanger Bracket, Front plate.	2000	3000	
114	2	Drawbar Face Plates . .	1000	1500	
115	1	Hand brake Adjuster . .	500	750	
116	1	,, Nut	500	750	
117	1	,, Washer . .	500	750	
118	4	Door Arrester Lever Arms .	Supplied by	Railway.	
119	8	,, Hinge Feet . . .	Home .	...	
120	8	Scroll Irons . . .	4000	6000	
121	1	Brake Shaft Long Lever .	500	750	
122	4	Brake Block Hanger . .	2000	3000	
123	4	Axleguards	2000	3000	
124	4	,, ...	2000	3000	
125	1	Handbrake Lever . . .	500	750	
126	8	Door Hinge	Home .	...	

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Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
127	2	Screw Coupling Lever Clamps	1000	1500	
128	4	Door Striking Plate . .	..	India.	
129	8	Packing Plate for Diagonals .			
130	4	Buffer Back Washers . .	Supplied by	Railway.	
131	4	„ Front „ . .			
132	8	Finger Pulls	Home .	...	
133	2	Screw Couplings Rivets . .	1000	1500	
134	2	„ „ Levers .	1000	1500	
135	8	Special Rivets for Hinges .	...	India.	
136	2	Screw Couplings Clamp Rivets	1000	1500	
137	4	Door Arrester Springs . .	Supplied by	Railway.	
138	4	Bearing Springs . . .	2000	3000	
139	4	Drawbar „ . .	Supplied by	Railway.	
140	8	Buffer „ . . .			
141	4	„ Recoil Springs . .			
142	2	Lever Holder Pins . .	...	India.	
143	8	Bridle Studs . . .			
144	1	Vertical Lever Hanger Bolts .			
145	2	„ „ „ „ .			
146	1	Brake Shaft Lever Pin . .			
147	4	Spring Spindle Headless Pins .			
148	4	Brake Block Hanger Bolts .			
149	16	Spring Shackle Pins . .			
150	1	Door Arrester Pin . .	Supplied by	Railway.	
151	12	Vertical Lever Bushes . .	...	India.	
152	2	Pull Rod Adjusting Pins .			
153	2	„ „ Pin M . . .			
154	1	Vertical Lever Bracket Pin .			

सत्यमेव जयते

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
155	4	Spindles for Draw Springs . .	2000	3000	
156	4	Nuts " " .	2000	3000	
157	2	Drawbar Securing Headless Pins.	...	India.	
158	2	Screw Coupling Shackle Pin .	1000	1500	
159	2	" " Screws .	1000	1500	
160	2	" " Shackle (Short)	1000	1500	
161	2	" " " (Hook)	1000	1500	
162	2	" " " (Long)	1000	1500	
163	8	" " Trunnion Nut Washer.	Home	...	
164	4	Screw Coupling Screw Washer			
165	4	" " Trunnion Nuts	2000	3000	
166	2	Drawbar Hooks . .	Home .	...	
167	4	Drawbar Spring Shackle .	2000	3000	
168	3	Vertical Lever Hanger . .	1500	2250	
169	1	Brake Shaft Lever . .	500	750	
170	4	Door Arrester Spring Sleeve and Swivel.	Supplied by	Railway.	
171	8	Solebar Stiffening Brackets .	4000	6000	
172	4	Buffer Plungers . . .	Home .	...	
173	4	Buffer Cases . . .			
174	4	Axlebox Slides . . .			
175	1	Cylinder Carrier Packing Block.	...	India.	
176	4	Brake Blocks . . .			
177	2	Screw Coupling Weights .			
178	1	Ferrule for Vibrater Hanger .			
179	...	Bolts and Nuts . . .	Home .	...	
180	...	Rivets			
181	1	Brake Shaft Short Lever .	500	750	

Statement of material used in construction of 425 C_2 Type Wagons by the Indian Standard Wagon Co. against Secretary, Railway Board, Order No. 33-S., dated 9th March 1925.

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
1	2	Solebars	...	India.	
2	2	Headstocks			
3	4	Longitudinals			
4	2	"			
5	2	Crossbars			
6	2	Drawbars Trimmers			
7	4	Corner Stanchions			
8	2	Curb Rails			
9	1	Vertical Lever Bracket Trimmers.			
10	2	Coping Angle, side			
11	2	" " end			
12	2	Floor " "			
13	1	Brake Rack			
14	2	Drawbar inside Wearing Angles			
15	8	Side Stanchion, Inter			
16	4	Door Stanchion			
17	4	" Top Stiffeners			
18	16	Underframe Knees			
19	4	Knee for Trimmer			
20	4	Headstock and Solebar Knee, Outside.			
21	4	Longitudinal, Crossbar and Diagonal Knee.			
22	4	End Stanchion			
23	8	Axle Guard Horn Cheeks			

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Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
24	1	Vacuum Brakework . .	England .	..	
25	4	Axlebox Bearings . . .			
26	4	„ Stud Washers ($\frac{5}{8}$" Single coil).	1,300	400	
27	...	Axleboxes . .	England .	...	
28	4	Brake Beams . . .	England .	...	
29	...	Paint, Linseed Oil, Coal Tar .	...	India.	
30	4	Diagonals			
31	2	Label Holders . . .			
32	2	„ „ . . .			
33	2	„ „ . . .			
34	16	Spring Shackle Pin Cotter .			
35	12	Tarpaulin Cleats . . .			
36	12	Packing Plate for Inter Stanchions.			
37	2	Pull Rod Adjusting Pin Cotter.			
38	4	Dust Shield Cover Plates .	England .	...	
39	4	Buffer Cotter . .	...	India.	
40	6	Split Cotters for Headless Pins.			
41	4	Cotter for Drawbar Spring Spindles.			
42	4	Packings between Sole and Scroll Irons.			
43	4	Do. do .			
44	2	Solebar and Headstock Gusset Plate.			
45	4	Solebar and Crossbar Gusset .			
46	2	Longitudinal Crossbar and Diagonal Gusset.			
47	2	End Plates			

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Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
48	4	Packing Plate for Corner Stanchions.	...	India.	
49	2	Plate over Side Door . .			
50	4	Side Plates			
51	2	Door Plates			
52	4	Coping Angle Gussets . .			
53	4	Butt Strip for Floor Plate .			
54	4	Door Packing Plates . .			
55	2	„ „ „ . . .			
56	4	Floor Plate O. . . .			
57	2	„ „ P. . . .			
58	2	„ „ R. . . .			
59	1	„ „ S. . . .			
60	2	Gib Cotters for Drawbar . .			
61	4	„ „ „ „			
62	12	Body Brackets . . .			
63	2	„ „ Centre . .			
64	4	Door Arrester Lever Arm Brackets.	1,280 supplied by Railway.	...	420 not fitted.
65	8	Door Arrester Shackle plates .	2,560 supplied by Railway.	...	840 not fitted.
66	2	Bridge Section over Door .	40 (England)	810 (India)	
67	2	Double Knee for Trimmer .	...	India.	
68	4	Door Arrester Lever Plates .	...	...	640 supplied by Railway and 210 not fitted.
69	2	Brake Shaft Hanger . .	...	India.	
70	4	Headstock, Solebar and Diagonal knee.			
71	4	Axlebox Dust Shields . .	England	...	

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
72	1	Washer for Handbrake Lever Chain, Pin.	100	325	
73	5	Door Handles . . .	...	India.	
74	1	Vibrator Hanger . . .			
75	1	Pull Rod D			
76	1	Connecting Rod . . .			
77	8	Hinge Pins			
78	1	Handbrake Lever Chainless Pin			
79	12	Special Rivets for Chain Cotter for securing Door.			
80	4	Axlebox Face Plate Studs .	England .	...	
81	4	Do. do. . .			
82	2	Suspender Hooks . . .	...	India.	
83	4	Buffer Nuts . . .	England .	...	
84	4	Brake Beam Nuts . .	1,180	520	
85	2	Rivets for Brake Shaft Arm .	...	India.	
86	4	Door Arrester Eyebolts .	...	...	1,280 supplied by Railway and 420 not fitted.
87	6	Chainless Cotter for securing Flap Door.	...	India.	
88	1	Brake Shaft Cotter Small .	...	India.	
89	1	" " " Large .			
90	1	Vertical Lever Bracket F .			
91	2	Door Arrester Spring Washers	...	...	640 supplied by Railway and 210 not fitted.
92	1	Handbrake Clutch . .	...	India.	
93	2	Brake Shaft Bushes . .			

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
94	4	Drawbar Spring Washers .	...	...	1,280 supplied by Railway and 420 India.
95	1	Brake Shaft . . .	...	India.	
96	4	Buffer Head and Shank .			
97	16	Spring Shackles . . .			
98	2	Short Pull Rods . . .			
99	2	Cylinder Carriers . . .	...	...	60 not fitted and 790 India.
100	4	Buffer Middle Washers . .	...	India.	
101	2	Connecting Rod Safety Hangers.			
102	2	Brake Shaft Keys . .			
103	1	„ „ „ . .			
104	4	„ Beam Safety Hangers .			
105	4	Train Pipe Clips			
106	4	Door Arrester Swivel Stop Plate	...	...	1,280 supplied by Railway and 420 not fitted.
107	2	Door Frames . . .	...	India.	
108	1	Vertical Lever Bracket C .			
109	2	„ „ Hanger . .			
110	4	Bridles . . .			
111	4	Vertical Levers . . .			
112	4	Brake Block Hanger Bracket, Back Plate.			
113	4	Brake Block Hanger Bracket, Front Plate.			
114	2	Drawbar Face Plates . .			
115	1	Handbrake Adjuster . .			
116	...	„ Nut . .			
117	1	„ Washer . .			

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Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
118	4	Door Arrester Lever Arms	...	...	1,280 supplied by Railway and 420 not fitted.
119	8	Door Hinge Feet	...	India.	
120	8	Scroll Irons			
121	1	Brake Shaft Long Lever			
122	4	,, Block Hanger			
123	4	Axleguards			
124	4	,,			
125	1	Handbrake Lever			
126	8	Door Hinge			
127	2	Screw Coupling Lever Clamps			
128	4	Door Striking Plate			
129	8	Packing Plate for Diagonals			
130	4	Buffer, Back Washers	...	...	Supplied by Railway.
131	4	,, Front ,,			
132	8	Finger Pulls Pin	England.	...	
133	2	Screw Couplings Rivets			
134	2	,, Levers	...	India.	
135	8	Special Rivets for Hinges			
136	2	Screw Couplings Clamp Rivets			
137	4	Door Arrester Springs	...	...	1,280 supplied by Railway and 420 not fitted.
138	4	Bearing Springs	...	India.	
139	4	Drawbar ,,	...	420	1,280 supplied by Railway.
140	8	Buffer ,,	...	840	2,560 supplied by Railway.

Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Home.	India.	
141	4	Buffer Recoil Springs . .	...	420	1,280 supplied by Railway.
142	2	Lever Holder Pins . .	...	India.	
143	8	Bridle Studs . . .			
144	1	Vertical Lever Hanger Bolts .			
145	2	,, ,, ,, ,, .			
146	1	Brake Shaft Lever Pin			
147	4	Spring Spindle Headless Pins			
148	4	Brake Block Hanger Bolts .			
149	16	Spring Shackle Pins .			
150	1	Door Arrester Pin . .	...	...	320 by Railway and 105 not fitted.
151	12	Vertical Lever Bushes . .	...	India.	
152	2	Pull Rod Adjusting Pins .			
153	2	,, ,, Pin M. .			
154	1	Vertical Lever Bracket Pin .			
155	4	Spindles for Draw Springs .			
156	4	Nuts ,, ,, ,, .	England.	...	
157	2	Drawbar Securing Headless Pins.	...	India.	
158	2	Screw Coupling Shackle Pin .			
159	2	,, ,, Screws .			
160	2	,, ,, Shackle (Short)			
161	2	,, ,, ,, (Hook)			
162	2	,, ,, ,, (Long)			
163	8	,, ,, Trunnion Nut Washer.			
164	4	Screw Coupling Screw Washer			
165	4	,, ,, Trunnion Nuts			
166	2	Drawbar Hooks . . .			
167	4	,, Spring Shackle .			

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Item.	No. per set.	Description.	Where manufactured.		Remarks.
			Hme .	India.	
168	3	Vertical Lever Hanger . .	...	India.	
169	1	Brake Shaft Lever . .	...	India.	
170	4	Door Arrester Spring Sleeve and Swivel.	...	...	1,280 supplied by Railway and 420 not fitted.
171	8	Solebar Stiffening Brackets .	200	3,200	
172	4	Buffer Plungers . .	England.	...	
173	4	,, Cases . . .			
174	4	Axlebox Slides . . .			
175	1	Cylinder Carrier Packing Block	...	395	30 not fitted.
176	4	Brake Blocks . . .	...	India.	
177	2	Screw Coupling Weights .			
178	1	Ferrule for Vibrator Hanger .	England.	...	
179	...	Bolts and Nuts . . .			
180	...	Rivets			
181	1	Brake Shaft Short Lever .	...	India.	

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Statement of materials used in construction of 480 A-2 Type Wagons by the Peninsular Locomotive Company against Agent, East Indian Railway Order. Contract dated 15th October 1925.

Item.	No. per set.	Description.	Where to be manufactured.		Remarks.
			Home.	India.	
1	4	Chainless Cotter for securing Swing Doors to Flap Door.	Home.		
2	4	Chainless Cotter for securing Swing Doors to Flap Doors.			
3	2	Label Holder with Flap Cover			
4	4	Swing Door Hook with Eye .			
5	6	" " Bolt Guide .			
6	1	Hand Hold			
7	2	Pin for Swing Door Bolt .			
8	2	Swing Door Bolt . . .			
9	2	" " Eye Bolt . .			
10	2	" " Frame . .	...	India.	
11	2	" " " . .			
12	2	" " Plate . .			
13	2	" " " . .			
14	2	" " Striking Plate .			
15	4	" " Packing " .			
16	2	Flap Door Frame . .			
17	2	" " Plate . .			
18	2 RH & 2 LH	" " Side Hinge . .	Home.	...	
19	2	" " Centre "			
20	8	Swing Door Hinge . .			
21	14	Door Hinge Pin . . .			
22	4	" Sealing Plate . .			

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Item.	No. per set.	Description.	Where to be manufactured.		Remarks.
			Home.	India.	
23	2	End Roof Plate . .	...	India.	
24	2	Inter ,, ,, . .			
25	2	,, ,, ,, . .			
26	1	Centre ,, ,,			
27	2	End Top Body Plate . .			
28	2	,, Centre Body Plate . .			
29	2	,, Bottom ,, ,, . .			
30	4	Side Top Body Plate			
31	4	,, Bottom Body Plate			
32	2 RH & 2 LH	Corner Stanchion . . .			
33	2 RH & 2 LH	End Inter Stanchion . .			
34	2	,, Centre ,, .			
35	4 RH & 2 LH	Side Inter ,, . .			
36	2 RH & 2 LH	Door Striking Plate (Side) .			
37	...	Side Door Stanchion .			
38	1	Floor Plate Centre . .			
39	2	,, ,, Side .			
40	4	Packing Plate for Corner Stanchion.			
41	6	Stanchion Joint Plate . .			
42	4	End Inter Stanchion Gusset .			
43	2	,, Centre ,, ,, . .			
44	4	Floor Plate (Side End) .			
45	2	,, ,, (Centre End)			

सत्यमेव जयते

Item.	No. per set.	Description.	Where to be manufactured.		Remarks.
			Home.	India.	
46	2	Door Top Angle . . .	...	India.	
47	2	„ Striking Plate (Top) .			
48	2	Roof Angle and Centre Stanchion Gusset.			
49	4	Roof Angle and Inter Stanchion Gusset.			
50	4	Butt Straps for Floor Plates .			
51	2	Corner Stanchion Joint Plate .			
52	2	Solebar			
53	2	Headstock			
54	2	Door Check Spring Bracket .			
55	2	Longitudinal Centre . .			
56	2	Curb Rail . . .			
57	2	Solebar and Headstock Gusset Plate.			
58	2	Cross Bar . .			
59	6 RH & 6 LH	Body Bracket . . .			
60	2 RH & 2 LH	Diagonals			
61	2	Drawbar Trimmer . .			
62	2	Double Knee for Trimmer .			
63	16	Underframe Knee . . .			
64	4	Headstock and Solebar Knee Outside.			
65	2 RH & 2 LH	Solebar and Crossbar Gusset .			
66	2	Longitudinal Crossbar and Diagonal Gusset.			

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Item.	No. per set.	Description.	Where to be manufactured.		Remarks.
			Home.	India.	
67	4	Knee for Trimmer	...	India.	
68	4	Solebar Stiffening Bracket			
69	8	Packing Plate for Diagonal (2 kinds).			
70	4	Headstock, Solebar and Diagonal Knee.			
71	2 RH & 2 LH	Longitudinal Crossbar and Diagonal Knee.			
72	1 RH & 1 LH	End Longitudinal			
73	1 RH & 1 LH	" "			
74	4 pairs	Axleguar, dcomplete			
75	8	Horn Cheeks			
76	4	Axleguard Bridle			
77	8	Scroll Iron			
78	8 pairs	Spring Shackles	Home.		
79	16	" " Pin			
80	16	" " Cotters			
81	4	Packing Piece between Solebar and Scroll Iron End.	...	India.	
82	4	Packing Piece between Solebar and Scroll Iron Middle.			
83	8	Axleguard Bridle Stud			
84	2	Drawbar Hook	Home.		
85	4	Spindles for Draw Springs with Nuts.			
86	4	Drawbar Spindle Cotters (Split).			
87	4	Drawbar Spindle Spring Washers.			

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Item.	No. per set.	Description.	Where to be manufactured.		Remarks.
			Home.	India.	
88	4	Drawbar Spring Shackles .	...	India.	
89	2	„ Headless Pins .			
90	2	„ „ Pin Cotters			
91	6	„ and Shackle Pin Cotters (Split).	Home.		
92	4	Drawbar Shackle Pin . .	...	India.	
93	4	„ „ Cotters .			
94	2	„ Inside Wearing Angle			
95	2	„ Face Plate . .			
96	2	Coupling Screw . . .	Home.	...	
97	2	„ Shackle 10″ long .			
98	2	„ „ 8″ long .			
99	2	„ to Drawbar . .			
100	2	„ Pin to Drawbar .			
101	2	„ „ Rivets .			
102	4	Trunnion Nut . .			
103	2	Centre Strap on Screw . .			
104	2	Coupling Lever . . .			
105	2	„ „ . .			
106	2	Suspender Hook . . .			
107	2	Rivets for Levers . .			
108	8	Trunnion Nut Washer . .			
109	4	Buffer Shank with Nut .			
110	4	Outside Case . . .			
111	4	Inside Case			
112	4	Front Washer . . .			
113	4	Middle „ . . .			

Item.	No. per set.	Descriptions.	Where to be manufactured.		Remarks.
			Home.	India.	
114	4	Back Washer . . .	Home.	...	
115	4	Buffer Split Cotter .			
116	4	Bearing Spring . . .			
117	12	Buffer and Draw Springs .	...	...	Supplied by Railway.
118	4	„ Recoil Spring . .			
119	2	Door Check „ . .	...	...	Not required.
120	2	Wheel and Axle complete .	...	..	Supplied by Railway.
121	4	Axlebox . . .	Home.	...	
122	4	Axlebox Bearing . . .			
123	4	Axlebox Face Plate . .			
124	4	„ Dust Shield . .			
125	4	„ „ „ Cover Plate			
126	4	„ Key Plate .			
127	4	„ Face Plate, Stud and Washer.			
128	4	„ „ Lock Nut .			
129	Complete.	„ Bore Train Pipe .			
130	1—2 1	Pair of Vertical Lever Bracket	...	India.	
131	2	Brake Beam with Nut and Washer.	Nuts and washers only.	Brake beam only.	
132	2	Cylinder Carrier . . .	..	India.	
133	1	„ „ Packing Block			
134	2	Short Pull Rod . . .	Home.	...	
135	4	Vertical Lever . . .			
136	1	„ „ Suspension Bracket.			
137	1	„ „ „ Trimmer.	...	India.	

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Item.	No. per set.	Descriptions.	Where to be manufactured.		Remarks.
			Home.	India.	
138	4	Brake Block Hanger	Home.	...	
139	2	Vertical Lever Hanger	...	India.	
140	2RH& 2LH.	Block Hanger Bracket complete.			
141	4	Brake Beam Safety Hanger			
142	12	Vertical Lever Bush	Home.	...	
143	2	Shouldered Rivets with Washers	...	India.	
144	1	Brake Shaft			
145	1	,, ,, Collar and Split Pin			
146	1	,, ,, ,, ,, ,,			
147	1	,, ,, Lever to Pull Rod			
148	1	,, ,, ,, Cylinder			
149	2	,, ,, ,, Keys			
150	1	,, ,, Key to Clutch Lever.			
151	1	,, ,, Cylinder Lever pin			
152	1	Washer to Hand Lever Chainless Pin.	Home.	...	
153	1	Chainless Pin to Hand Brake Lever.			
154	2	Brake Shaft Hanger	...	India.	
155	1	Pull Rod			
156	1	Connecting Pull Rod			
157	2	,, ,, ,, Safety Hanger.			
158	1	Connecting Pull Rod Centre Carrier.			
159	1	,, ,, ,, Roller			
160	4	Brake Block			
161	2	,, Shaft Bush			

Item.	No. per set.	Descriptions.	Where to be Manufactured.		Remarks.
			Home.	India.	
162	4	Pipe Clip	...	...	Excess from G.I.P. Ry.
163	4	Brake Block Hanger Bolt .	Home.	...	
164	1	Vertical Lever Hanger Bolt .			
165	2	,, ,, ,, ,,			
166	2	Pin to Short Pull Rod and Brake Beam.			
167	2	Cotter for Pin "P" .			
168	1	Vertical Lever Bracket Pin .	...	India.	
169	2	Pull Rod Pin . . .			
170	2	Bevel Washer . . .			
171	1	Hand Brake Lever . .			
172	1	,, ,, ,, Clutch .			
173	1	,, ,, ,, ,, adjusting Bolt.	Home.	...	
174	1	,, ,, ,, ,, Head .			
175	1	,, ,, ,, ,, Wing Nut.			
176	1	Brake Rack	...	India.	
177	1	Vacuum Brake Cylinder .	Home.	...	
178	2	2″ Hose Pipe and "C" Coupling.			
179	1	¾″ ,, ,, . .			
180	2	Swan Neck			
181	2	2″ Dummy Plug . . .			
182	2	Dummy Carrier . .			
183	4	2″ Hose Pipe Clip . . .			
184	2	¾″ ,, ,, ,, . . .			
185	1	Syphon Tee and Pipe . .			

Statement of Materials used in Construction of 500 A2 type wagons by the Peninsular Locomotive Company against Agent G. I. P. Railway, Agreement, dated 25th October 1924 Order.

Item.	No. per set.	Description.	Where to be Manufactured.		Remarks.
			Home.	India.	
			Sets.	Sets.	
1	4	Chainless Cotter for securing swing Doors to Flap Door.	50	450	
2	4	„ do Flap Doors .	50	450	
3	2	Lavel Holder with Flap Cover	(1000 nos.) (500 sets.)	...	
4	4	Swing Door Hook with eye .	50	450	
5	6	„ do. Bolt Guide .	50	450	
6	1	Hand Hold . . .	50	450	
7	2	Pin for Swing Door Bolt .	50	450	
8	2	Swing Door Bolt . .	50	450	
9	2	„ do. Eye Bolt . .	50	450	
10	2	„ do. Frame . .	...	India.	
11	2	„ do. do. . .			
12	2	„ do. Plate . .			
13	2	„ do. do. . .			
14	2	„ do. Striking Plate .			
15	4	„ do. Packing Plate .			
16	2	Flap Door Frame . . .			
17	2	„ do. Plate . . .			
18	2RH & 2LH	„ do. Side Hinge . .	50	450	
19	2	„ do. Centre Hinge .	50	450	
20	8	Swing Door Hinge . .	50	450	
21	14	Door Hinge Pin . .	50	450	
22	4	Door Sealing Plate . .	50	450	

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Item.	No. per set.	Description.	Where to be Manufactured.		Remarks.
			Home.	India.	
			Sets.	Sets.	
23	2	End Roof Plate . . .	...	India.	
24	2	Inter „ do. . . .			
25	2	„ „ do. . . .			
26	1	Centre Roof Plate . . .			
27	2	End Top Body Plate . .			
28	2	„ Centre do. . .			
29	2	„ Bottom do . .			
30	4	Side Top Body Plate . .			
31	4	„ Bottom Body Plate .			
32	2RH & 2LH	Corner Stanchion . .			
33	2RH & 2LH	End Inter Stanchion . .			
34	2	„ Centre do. . .			
35	4RH & 2LH	Side Inter do. . .			
36	2RH & 2LH	Door Striking Plate (Side) .			
37	...	Side Door Stanchion . .			
38	1	Floor Plate Centre . .			
39	2	„ do. Side . . .			
40	4	Packing plate for Corner Stanchion.			
41	6	Stanchion Joint Plate . .			
42	4	End Inter Stanchion Gusset .			
43	2	„ Centre do. . . .			
44	4	Floor Plate (Side End) .			

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Item.	No. per set.	Description.	Where to be Manufactured.		Remarks.
			Home.	India.	
45	2	Floor Plate (Centre End) .			
46	2	Door Top Angle . .			
47	2	Door Striking Plate (Top)			
48	2	Roof Angle and Centre Stanchion Gusset.			
49	4	,, do. Inter do.			
50	4	Butt Straps for Floor Plates			
51	2	Corner Stanchion Joint plate			
52	2	Solebar			
53	2	Headstock			
54	2	Door Check Spring Bracket .			
55	2	Longitudinal Centre . .			
56	2	Curb Rail . . .			
57	2	Solebar and Headstock Gusset Plate.	...	India.	
58	2	Cross Bar			
59	6 RH & 6 LH	Body Bracket . . .			
60	2 RH & 2 LH	Diagonals			
61	2	Drawbar Trimmer . .			
62	2	Double knee for Trimmer .			
63	16	Underframe Knee . .			
64	4	Headstock and Solebar Knee Outside.			
65	2 RH & 2 LH	Solebar and Crossbar Gusset			
66	2	Longitudinal Crossbar and Diagonal Gusset.			
67	4	Knee for Trimmer . .			

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Item.	No. per set.	Description.	Where to be Manufactured.		Remarks.
			Home.	India.	
			Sets.	Sets.	
68	4	Solebar stiffening Bracket .	50	950	
69	8	Packing Plate for Diagonal (2 kinds).	...	India.	
70	4	Headstock Solebar and Diagonal Knee.			
71	2 RH & 2 LH	Longitudinal Crossbar and Diagonal Knee.			
72	1 RH & 1 LH	End Longitudinal . . .			
73	1 RH & 1 LH	„ do. . . .			
74	4 pairs	Axleguard, complete . .	100	400	
75	8	Horn cheeks . . .	100	400	
76	4	Axleguard Bridle . . .	50	450	
77	8	Scroll Iron	100	400	
78	8 pairs	Spring Shackles . . .	50	450	
79	16	Spring Shackles Pin . .	50	450	
80	16	„ do. Cotters . .	50	450	
81	4	Packing piece between solebar and scroll iron End.	...	India.	
82	4	Packing piece betwaen solebar and scroll iron Middle.			
83	8	Axleguard Bridle Stud . .	50	450	
84	2	Drawbar Hook . . .	50	450	
85	4	Spindles for Draw Springs with Nuts.	50	450	
86	4	Drawbar Spindle Cotters (Split)	500	...	
87	4	„ do. Spring washers.	50	450	
88	4	„ Spring shackles .	50	450	
89	2	„ Headless Pins .	500	...	

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Item.	No. per set.	Description.	Where to be Manufactured.		Remarks.
			Home.	India.	
			Sets.	Sets.	
90	2	Drawbar Headless Pin Cotters	50	450	
91	6	„ and Shackle Pin cotters (Split).	50	450	
92	4	„ Shackle Pin	500	...	
93	4	„ do. Cotters	50	450	
94	2	„ Inside Wearing Angle.	...	India.	
95	2	„ Face Plate	50	450	
96	2	Coupling Screw	500	...	
97	2	„ Shackle 10″ long	150	350	
98	2	„ do. 8″ long	150	350	
99	2	, to Drawbar	150	350	
100	2	„ Pin to Drawbar	150	350	
101	2	„ do. Rivets	150	350	
102	4	Trunnion Nut	150	350	
103	2	Centre Scrap on screw	150	350	
104	2	Coupling Lever	150	350	
105	2	„ do.	150	350	
106	2	Suspender Hook	50	450	
107	2	Rivets for Levers	150	350	
108	8	Trunnion Nut Washer	150	350	
109	4	Buffer Shank with Nut 9	500	...	
110	4	Outside Case	500	...	
111	4	Inside Case	500	...	
112	4	Front Washer	500	...	
113	4	Middle Washer	500	...	
114	4	Back Washer	500	...	
115	4	Buffer Split Cotter	500	...	
116	4	Bearing Spring	500	...	

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Item.	No. per set.	Description.	Where to be Manufactured.		Remarks.
			Home.	India.	
			Sets.	Sets.	
117	12	Buffer and Draw Springs .	500	...	
118	4	" Recoil Spring . .	500	...	
119	2	Door Check	...	..	Not Required.
120	2	Wheel and Axle complete .	...	...	To be supplied by Railway.
121	4	Axlebox	500	...	
122	4	Axlebox Bearing . . .	500	...	
123	4	" Face Plate . .	500	...	
124	4	" Dust Shield . .	500	...	
125	4	" do. Cover plate	500	...	
126	4	" Key Plate .	500	...	
127	4	" Face plate stud and washer.	500	...	
128	4	Axlebox Face plate Lock nut .	500	...	
129	Complete 1	2″ Bore Train Pipe . .	500	...	
130	1	Pair of Vertical Lever Bracket	100	400	
131	2	Break Beam with Nut and Washer.	100	400	
132	2	Cylinder Carrier . . .	50	450	
133	1	" do. Packing Block	50	500	50 sets excess.
134	2	Short Pull rod . . .	50	450	
135	4	Vertical Lever . . .	50	450	
136	1	" do. Suspension Bracket.	50	450	
137	1	Vertical Lever Suspension Bracket Trimmer.	50	450	
138	4	Brake Block Hanger . .	50	450	

Item.	No. per set.	Description.	Where to be Manufactured.		Remarks.
			Home.	India.	
			Sets.	Sets.	
139	2	Vertical Lever Hanger . .	50	450	
140	2RH & 2LH	Block Hanger Bracket complete.	50	450	
141	4	Break Beam Safety Hanger .	50	450	
142	12	Vertical Lever Bush . .	50	450	
143	2	Shouldered Rivets with Washers.	500	...	
144	1	Brake Shaft . . .	50	450	
145	1	,, do. Collar and Split pin.	50	450	
146	1	Brake Shaft Collar and Split pin.	50	450	
147	1	Brake Shaft Lever to Pull rod.	50	450	
148	1	Brake Shaft Lever to Pull rod Cylinder.	50	450	
149	2	Brake Shaft Lever to Pull rod Keys.	50	450	
150	1	Brake Shaft key to Clutch Lever.	50	450	
151	1	Brake Shaft Cylinder Lever pin.	50	450	
152	1	Washer to Hand Lever chainless pin.	50	450	
153	1	Chainless pin to Hand Brake Lever.	50	450	
154	2	Brake Shaft Hanger . .	50	450	
155	1	Pull Rod	50	450	
156	1	Connecting Pull Rod . .	50	450	
157	2	,, do. Safety Hanger.	50	450	
158	1	Connecting Pull rod Centre Carrier.	50	450	
159	1	Do. do. Roller .	50	450	

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Item.	No. per set.	Description.	Where to be Manufactured.		Remarks.
			Home.	India.	
			Sets.	Sets.	
160	4	Brake Block .	50	500	50 sets excess.
161	2	„ Shaft Bush . . .	50	450	
162	4	Pipe Clip	...	India.	
163	4	Brake Block Hanger Bolt .	50	450	
164	1	Vertical Lever Hanger Bolt .	50	450	
165	2	„ do. .	50	450	
166	2	Pin to short pull rod and Break Beam.	50	450	
167	2	Cotter for Pin "P" . .	50	450	
168	1	Vertical Lever Bracket Pin .	50	450	
169	2	Pull Rod Pin . . .	50	450	
170	2	Bevel Washer . . .	50	450	
171	1	Hand Brake Lever . .	100	400	
172	1	„ do. Clutch .	100	400	
173	1	„ do. „ adjusting bolt.	50	450	
174	1	Hand Brake Lever Head .	50	450	
175	1	„ do. Wing Nut .	50	450	
176	1	Brake Rack	50	450	
177	1	Vacuum Brake Cylinder .	500	...	
178	2	2″ Hose Pipe and "C" Coupling.	500	...	
179	1	$\frac{3}{4}$″ Do. do. . . .	500	...	
180	2	Swan Neck	500	...	
181	2	2″ Dummy Plug . . .	500	...	
182	2	Dummy Carrier . . .	50	450	
183	4	2″ Hose Pipe clip . . .	500	...	
184	2	$\frac{3}{4}$″ Do. do. . .	500	...	
185	1	Syphon tee and pipe	500	...	

V.—Note on the capacity of the Peninsular Locomotive Works to build locomotives while engaged on turning out wagons.

The answering of this question presents considerable difficulties and I find it is quite beyond my power to estimate the economic unit of locomotive production by these works while simultaneously employed on wagon work. This estimate can only be made by one who has access to the books of the firm and with experience in locomotive manufacture.

Dealing with the question of the capacity of the firm to build locomotives and wagons simultaneously it is first necessary to outline the present position of the works.

The works were originally designed with a view to undertaking the manufacture of locomotives. It was proposed in the first instance that only certain component parts would be manufactured in the works, others imported and the whole assembly undertaken. A portion only of the plant was received, the balance being cancelled when the firm found themselves unable to secure orders. Speaking generally the locomotive plant installed in these works is either unsuitable, or quite unnecessarily heavy, for the production of wagon components, and it is deficient in machines suitable for fabricating and assembling the frame work and light plating which forms so large a part of goods wagons: consequently when wagon orders were obtained it was found necessary to supplement such of the plant as had been shipped by certain items of machinery suitable for wagon production before the orders could be dealt with, and to sublet orders for the majority of the forgings, either to firms in this country or abroad.

The present position is then that the works are not well equipped for locomotive building owing to the complete plant not having being installed and not altogether suitably equipped for wagon building because the plant was not originally intended for that purpose.

Assuming that the locomotive plant were completed and orders for locomotives received, the simultaneous production of wagons would necessarily greatly restrict their capacity for locomotive work. It might be possible to continue to make a certain number of components without delaying the production of the locomotive parts but the erection of wagons would necessarily occupy space in the erecting shops designed for locomotive erection. The erection of wagons does not require the use of such heavy lifting appliances as are necessary for locomotive erection, but lifting appliances are necessary, and most of the erecting work on wagons must be done under cover even during the cooler dry months. I estimate that the erection of three wagons occupies about the same space in the erecting shops as would one locomotive. In their evidence the firm have stated that the works is laid out for 300 locomotives a year. We have estimated the capacity of this works for wagon production to be 900 per annum at the present time, which corresponds to the ratio given so far as the erecting shops are concerned. I am not in a position to say whether the plant as a whole is capable of producing a sufficient number of such components as it was proposed to make for 300 locomotives yearly.

As already stated the principal limiting factor in the simultaneous production of wagons and locomotives is erecting shop capacity. Consequently if, say, 25 locomotives and 825 wagons per annum were being built, I estimate that the erecting shops would be fully occupied, but if the firm's estimate of locomotive outturn is correct some of the locomotive machinery would be idle for a very large portion of the year. This must seriously affect the economics of the question of simultaneous locomotive and wagon building, but, as I have already said, I am unable to make any useful comments on this aspect of the question.

The complete plant for a production of 300 locomotives per annum has, however, not been installed and it seems probable that, if it were decided that locomotive building were worthy of State assistance, the plant could be adjusted so as to render a much smaller annual output of locomotives than 300 a business proposition, if combined with wagon building. Thus, for example, it seems possible that by such adjustments the simultaneous production of, say, 60 locomotives and 720 wagons would keep all sections of the works occupied and if necessary the productive capacity for wagons could be increased by the addition of an erecting shop for wagons only.

J. S. PITKEATHLY.

Dated the 9th August 1926.

VI.—Comments by the Chief Controller of Stores on the reply given by the Peninsular Locomotive Company to the Tariff Board's enquiry regarding component parts of locomotives.

I make the following comments on the reply given by the Peninsular Locomotive Company to the Tariff Board's enquiry :—

(1) *Iron Castings.*—All the iron castings could probably be obtained in India, but the production of the finer castings such as cylinders, etc., would be limited to a few firms. The Calmoni Engineering Company are not now working. When they were working the quality of castings turned out was not high and I have no hesitation in stating that the more important locomotive castings could not safely have been entrusted to the firm in their then stage of development. The firm's statement may, however, be generally accepted.

(2) *Steel Castings.*—Since the reply was given two out of the then existing steel founding works have shut down. I refer to the Kirtyanand Iron and Steel Company and Messrs. Fairbairn Lawson, Combe Barbour, Limited. The latter had a good plant and turned out high class castings; the quality of work turned out by the former was not high. The only firm now remaining is the Hukamchand Electric Steel Company.

The Peninsular, Locomotive Company stated that their Works was designed for an annual output of 300—400 locomotives per annum, and that they were capable of producing 200 locomotives per annum from the outset. Considerations of price apart, I am convinced that the one remaining steel works in India which produces steel castings could not supply all the castings required and guarantee suitable dates of delivery, even assuming that they could produce castings strictly in accordance with the specification, and on this point I am somewhat doubtful, in any case there would be no internal competition for orders for steel castings. I should expect to find in practice that the bulk, if not all, the castings were actually imported even as the bulk of axle boxes for wagons are now being imported in spite of the fact that the Hukamchand Steel Company have laid themselves out specially to produce axle boxes.

(3) *Steel Plate Work.*—The Company's statement is endorsed.

(4) *Boiler Firebox.*—I am not aware that boiler making has yet been attempted in this country. I should be surprised to find that a firm were able to train labour in three years so as to produce a locomotive boiler which would comply with the requirements of the specification. The raw material for the shell would have to be imported as well as the tubes and other parts.

(5) *Steel Forgings.*—The production of forgings appears to offer no insuperable difficulties. Steel billets would have to be obtained from the Metal and Steel Factory, Ishapore or imported. There is no present prospect of acid steel being made by any firm in India.

(6) *Steel Springs.*—The Hukamchand Steel Works are able to produce billets for spring sections. We do not know whether the quality is satisfactory or uniform or whether these billets can be produced at economic rates. Arrangements could probably be made to get their billets rolled into sections in other works but it is improbable that this steel works alone could produce the quantity required. An alternative source of supply is The Metal and Steel Factory, Ishapore, failing which importation of the requisite sections would have to be resorted to. The making of springs of the correct dimensions and temper is a difficult art and not a mere matter of material and plant.

(7) *Special Fittings.*—The majority of these would have to be imported. They are expensive and the value represented by them is therefore very high compared with the comparatively insignificant weight quoted.

(8) *Non-Ferrous Parts.*—These too have a high percentage value compared to the weight shown. There are very few firms in India which produce non-ferrous castings to a rigid specification of composition and strength. I should expect to find the majority of them being imported in the finished state. Tubes are not made in this country.

(9) *Wheels and Axles.*—The firm state that machining and finishing can be done in the works, but I believe they have no wheel or tyre presses necessary for assembling. I do not think it would be a good commercial proposition to import blanks and rough forgings and finish in India. I should expect to find in practice that wheels and axles were imported in the finished state, as in the case of wagon wheels and axles. Both wheels and axles are made from acid open hearth steel which is not made commercially in India and there appears to be no prospect of wheel making works being established in this country.

In considering whether a substantial proportion of the fabrication of locomotives can be, or is likely to be, carried out in this country, it would be better to have the relative values of the different classes of work than the relative weights given by the Peninsular Locomotive Company. The cost per unit of weight varies greatly in the different classes, *e.g.*, (1) Iron Castings and (3) Structural Work are much cheaper than (5) Motion Work forgings and these latter are again cheaper than (7) the Copper and Brass work. This department, however, has not the information necessary to recast the items in terms of cost represented.

J. S. PITKEATHLY.

9th May 1926.

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Report on the tests carried out by the Indian Stores Department on the products of the Agricultural Implements Company, Limited.

These implements are subjected to practical tests when purchased through and inspected by this department. The majority of consumers buy direct. Three thousand phowras recently purchased by us were satisfactory and reports on Agrico's goods generally are satisfactory.

Tests were made this year on random samples of crow-bars at the firm's works in connection with a complaint from the Bengal & North-Western Railway that crow-bars purchased by them direct were weak and suggestions for the improvement of design and treatment were made but no important defect was discernible.

Agrico's implements are regarded as satisfactory and have been adopted as the standard by some large users of the implements made by them.

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(3) Letter No. D.-116, dated 11th August 1926, from the Chief Controller of Stores, Indian Stores Department.

In continuation of my letter No. D.-116, dated the 9th August 1926, I have the honour to forward the following statements for the information of the Tariff Board :—

A. Statements showing prices paid by the Director General, India Stores Department, London, for rolled steel sections, calculated f.o.r. Bombay, during 1924-25, 1925-26 and first quarter of 1926-27.

B. Statement showing prices at which an order for steel sections was placed half with the Tata Iron and Steel Company, Limited, in India (for urgent requirements), and half on the Director General, India Stores Department, London. But for the present industrial situation in England the Tata Iron and Steel Company would have lost this order on the grounds of price *vide* the footnote on the statement.

C. Statements showing the total quantity and cost of steel sections (ordinary) purchased by the India Stores Department during 1924-25, 1925-26, and first quarter of 1926-27.

D. Statements showing the particulars cost of protected articles (fabricated) purchased by the India Stores Department during 1924-25, 1925-26 and first quarter of 1926-27.

2. This completes the information called for by the Board in the course of my recent evidence with the exception that the Board desired to have a few instances of orders for fabricated steel which were lost to Indian Manufacturers owing to their prices being higher. I have carefully examined all our records and find that no orders for fabricated steel, dealt with by this Department, have been lost to Indian manufacturers.

A.—Statements showing prices paid by the Director General, India Store Department, London, for rolled steel sections, calculated F.O.R. Bombay, during 1924-25, 1925-26 and first quarter of 1926-27.

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Statement showing prices paid by the Director General, India Store Department, London, for Rolled Steel Sections, calculated F. O. R. Bombay.

SUMMARY—1924-1925.

	NON-FABRICATED.				FABRICATED.				
	BRITISH.		CONTINENTAL.			BRITISH.		CONTINENTAL.	
	Quantity. T. c. q. lbs.	Value. Rs. A. P.	Quantity. T. c. q. lbs.	Value. Rs. A. P.		Quantity. T. c. q. lbs.	Value. Rs. A. P.	Quantity. T. c. q. lbs.	Value. Rs. A. P.
Angles, M. S. .	17 11 0 0	2,946 14 2	161 12 3 0	21,958 4 6	Structural .	1,150 11 0 16	3,96,113 10 5	...	...
Channels „ .	48 13 1 14	8,745 4 0	...	...					
Joists, R. S. .	329 18 0 14	56,869 13 0	...	...					
Tees, M. S. .	20 0 0 0	3,591 5 8	...	...					
Bars and rods	114 17 1 12	24,522 2 9	...	...					
Plates and sheets.	958 13 2 10	3,00,807 9 7	433 8 1 16	77,812 12 8					

Items.	Sizes.	Quantity imported.	Home price per ton in sterling.	F. O. B. Continental or British ports. British—B. Continental—C.	Price F. O. R. Bombay including Customs Duty and all other charges under rule 8.		Date of contract.	Total value.
					Per ton.	Per cwt.		
		T. c. qr. lbs.	£ s. d.		Rs. A. P.	Rs. A. P.		Rs. A. P.
Angles, mild steel.	1½″ × 1½″ × 1¼″ 1¾″ × 1¾″ × ¼″.	17 11 0 0	9 17 6	B.	167 14 10	8 6 4·1	24-5-24	2,946 14 2
Angls, mild steel.	3½″ × 3½″ × ⅜″ . .	161 12 3 0	7 2 6	C.	135 13 7	6 12 8·15	14-11-24	21,958 4 6
Channels, mild steel.	5″ × 2½″ × ⅜″ . .	5 0 0 0	8 10 0	B.	164 6 5	8 3 6·25	20-12-24	822 0 1
Channels, mild steel.	2½″ × 1″ at 4·14 lbs. .	43 13 1 4	10 15 0	B.	181 7 4	9 1 2	21-10-24	7,923 3 11
Joists, rolled steel.	24″ × 7½″ at 100 lbs. per foot.	73 8 3 25	9 2 0	B.	172 7 8	8 9 11·8	15-10-24	12,669 14 3
Joists, rolled steel.	12″ × 6″ at 54 lbs. per foot.	35 5 2 23	8 0 0	B.	157 10 0	7 14 1·2	24-12-24	5,561 13 5
Joists, rolled steel.	24″ × 7½″ at 100 lbs. per foot.	95 12 2 0	9 8 9	B.	176 15 4	8 13 6·8	6-2-25	16,923 10 1
Joists, rolled steel.	20″ × 7½″ and 18″ × 7″ at 89 lbs. and 75 lbs. per foot.	125 10 3 22	9 3 9	B.	172 15 4	8 10 4·4	6-2-25	21,714 7 3
Tee, mild steel .	2″ × 2″ × ⅜″ . .	20 0 0 0	9 12 6	B.	179 9 1	8 15 7·85	20-12-24	3,591 5 8

2.—BARS AND RODS.								
Bars, mild steel, hex.	0·525, 0·71, 0·92, 1·1, 1·3, 1·48, 1·67, 1·86.	34 19 0 0	10 10 0	B.	201 5 7	10 1 1	23-12-24	7,037 5 3
Bars, mild steel, hex.	1·295/1·3, 1·475/1·48, 1·665/1·67.	4 18 0 0	17 0 0	B.	288 15 4	14 7 2	23-12-24	1,415 14 4
Bars, mild steel, bolt staves.	2" dia . . .	1 0 0 0	10 2 6	B.	196 4 8	9 13 0·4	2-1-25	196 4 8
Flats, steel, mild.	5" × 2" and 4" × $\frac{1}{4}$" .	4$\frac{1}{2}$tons.	11 10 0	B.	214 12 8	10 11 10	1-7-24	966 9 0
Rods, mild steel, for re-inforcement work.	$\frac{1}{4}$" dia. in lengths of 20', 21' and 22'.	10 "	12 10 0	B.	228 5 7	11 6 8·15	11-7-24	2,283 7 10
Rods, mild steel, for re-inforcement work.	$\frac{3}{8}$" dia. in lengths of 20, 21 and 22 feet.	12 "	11 10 0	B.	214 12 8	10 11 10	11-7-24	2,577 8 0
Rods, mild steel, for re-inforcement work.	$\frac{1}{2}$" dia. in lengths of 20, 21 and 22 feet.	8 "	10 10 0	B.	201 5 7	10 1 1	11-7-24	1,610 12 8
Rounds, mild steel, bright.	$\frac{5}{32}$", $\frac{3}{16}$", $\frac{3}{8}$", $\frac{7}{16}$", and $\frac{9}{16}$" dia.	1 10 2 0	21 0 0	B.	342 14 3	17 2 3·75	21-7-24	522 14 6
Rounds, mild steel, bright.	$\frac{1}{2}$", $\frac{5}{8}$", $\frac{3}{4}$", $\frac{7}{8}$", 1", 1-$\frac{1}{8}$", 1$\frac{1}{4}$", 1$\frac{1}{2}$", 1$\frac{3}{4}$" and 2".	16 0 0 0	10 0 0	B.	168 9 10	8 6 10·7	24-5-24	2,697 13 4
Rounds, mild steel, bright.	$\frac{3}{4}$", $\frac{7}{16}$" and $\frac{7}{8}$" dia.	0 19 3 12	17 0 0	B.	288 15 4	14 7 2	1-12-24	286 14 3
Rounds, mild steel.	4$\frac{1}{2}$" . . .	17 10. 0 0	8 17 6	B.	179 6 5	8 15 6·25	20-12-24	3,139 8 3

Items.	Sizes.	Quantity imported.	Home price per ton in sterling.	F. O. B. Continental or British ports. British—B. Continental—C.	Price F. O. R. Bombay including Customs Duty and all other charges under rule 8.		Date of contract.	Total value.
					Per ton.	Per cwt.		
		T. c. q. lbs.	£ s. d.		Rs. A. P.	Rs. A. P.		Rs. A. P.
2.—BARS AND RODS—*contd.*								
Rounds, mild steel, bright, sizes	¼″, 5/16″ and 7/16″ dia.	0 4 0 0	23 0 0	B.	369 14 5	18 7 11·05	17-2-25	73 15 8
Rounds, mild steel, bright.	9/16″ dia.	0 2 0 0	21 3 0	B.	344 14 5	17 3 11·05	17-2-25	34 7 10
Rounds, mild steel, bright.	⅞″, 1½″ and 2″ dia.	0 12 0 0	17 3 0	B.	391 2 11	19 8 11·35	17-2-25	234 11 0
Steel flat	·425″ × ·258″ × 4′·4″	2 0 0 0	37 0 0	B.	636 5 1	31 13 0·65	27-8-24	1,272 10 2
Steel round	3⅜″	0 12 0 0	16 15 0	B.	285 9 11	14 4 6	25-8-24	171 6 0
6.—PLATES AND SHEETS.								
Plates and sheets, mild steel.	8′ × 3′ × ¼″, 8′ × 4′ × ¼″, 12′ × 3′ × ½″, 12′ × 4′ × ¼″.	47 18 2 12	7 15 0	C.	154 4 8	7 11 5.2	2-7-24	7,312 9 7
Plates and sheets, mild steel.	8′ × 3′ × 3/16″, 8′ × 4′ × 3/16″, 12′ × 3′ × 3/16″, 12′ × 4′ × 3/16″.	24 15 1 21	10 5 0	B.	188 1 1	9 6 5·45	2-7-24	4,658 12 7
Plates and sheets, mild steel, galvanized.	12′ × 3′ × ⅛″, 12′ × ′3 × ⅛″.	27 12 1 25	20 10 0	B.	326 5 7	16 5 1	2-7-24	6,582 4 11

Plates, floor, mild steel.	$9\frac{1}{2}' \times 2\frac{1}{2}' \times \frac{1}{16}''$	5 13 2 8	14 0 0	B	238 8 8	11 14 10	26-6-24	1,354 9 3
Plates, for repairing boiler barrels, mild steel.	9′-6″ × 3′ 9″ × ½″ B-2 class. 9′-6″ × 6′ × ½″ B-3 class. 9′-6″ × 5′-6″ × ½″ G class. $10' \times 4'$-$8'' \times \frac{9}{16}''$ H class. 9′-6″ × 6′ × ½″ J class. $10'$-$6'' \times 5'$-$9'' \times \frac{9}{16}''$ S. G. class. 10′ × 6′-6″ × ½″ G-2 class.	5 19 0 0	14 5 0	B	241 12 7	12 1 5·15	8-10-24	1,438 10 1
Plates, mild steel	¼″ × 8′ × 4′	4 8 2 27	9 15 0	B	181 4 0	9 1 0	27-6-24	804 3 5
Plates, mild steel, chequered.	8′ × 4′ × ¼″	2 10 0 10	11 0 6	B	198 1 6	9 14 5·7	16-6-24	493 1 10
Sheets, mild steel.	8′-0″ × 2′-10″ × 10 S. W. G. 5′-11″ × 1′-8″ × 10 S. W. G. 7′-4″ × 3′-0″ × 10 S. W. G.	15 2 0 9	11 15 6	B	208 3 4	10 6 6·8	19-4-24	3,144 12 6

Items.	Sizes.	Quantity imported.	Home price per ton in sterling.	F. O. B. Continental or British ports. British—B. Continental—C.	Price F. O. R. Bombay including Customs Duty and all other charges under Rule 8.		Date of contract.	Total value.
					Per ton.	Per cwt.		
6.—PLATES AND SHEETS—*contd.*		T. c. q. lbs.	£ *s.* *d.*		Rs. As. P.	Rs. As. P.		Rs. As. P.
Sheets, mild steel	8'-0" × 2'-2", 12 S. W. G. 6'-10" × 3'-0", 12 S. W. G.	102 11 1 6	12 0 0	B	211 9 3	10 9 3·15	19-4-24	21,800 8 10
Sheets, mild steel	6' × 3', ⅛" and 10 S. W. G.	Nos. 266	11 5 0	B	201 7 6	10 1 2·1	20-6-24	...
Sheets, mild steel	22 B. G. and 24 B. G. thick.	1 1 2 23	14 0 0	B	238 8 3	11 14 9·75	25-7-24	258 13 8
Sheets, mild steel	10 B. G. and ⅛" thick 6' × 2' 6' × 3' 8' × 4'	6 11 1 7	12 0 0	B	211 9 3	10 9 3·15	14-8-24	1,389 3 8
Sheets, mild steel,	21 S. W. G. 6' × 3' .	Nos. 1316	13 15 0	B	235 2 9	11 12 1·65	29-8-24	...
Sheets, mild steel, convex.	⅝" × $\frac{3}{16}$" . .	2 17 0 0	13 15 0	B	235 2 11	11 12 1·65	7-7-24	501 11 2

Sheets, mild steel, re-sheared and ordinary shearing.	15 S. W. G. 4'-0" × 2'-3".	234 17 2 4	12 4 6	C	213 4 5	10 10 7·45	24-9-24	50,093 9 6
	15 S. W. G. 8'-0" × 2'-0".							
	15 S. W. G. 8'-0" × 1'-5".							
	14 S. W. G. 5'-6" × 3'-0".							
	13 S. W. G. 7'-7" × 2'-6".							
	12 S. W. G. 8'-0" × 2'-2".							
	12 S. W. G. 6'-10" + 3'-0".							
	11 S. W. G. 7'-10" × 3'-0"							
	10 S. W. G. 8'-0" × 2'-10".							
	10 S. W. G. 5'-11" × 1'-8".							
	10 S. W. G. 7'-4" × 3-0".							
Sheets, mild steel, galvanized, plain.	6', 7' and 8' × 3' × 22 B. G.	29 11 1 6	22 12 6	B	369 13 7	18 7 10·55	10-7-24	10,934 10 5

Items.	Sizes.	Quantity imported.	Home price per ton in sterling.	F. O. B. Continental or British ports. British—B. Continental—C.	Price F. O. R. Bombay including Customs Duty and all other charges under Rule 8.		Date of contract.	Total value.
					Per ton.	Per cwt.		
		T. c. q. lbs.	£ s. d.		Rs. As. P.	Rs. As. P.		Rs. As. P.
6.—PLATES AND SHEETS—*contd.*								
Sheets, mild steel, galvanized, plain.	6′ × 18 B. G. × 3′ .	11 2 1 8	22 5 0	B	364 18 4	18 3 11·6	10-7-24	4,056 14 5
	6′ × 20 B. G × 3′ .							
	6′ × 22 B. G. × 3′ .							
	8′ × 18 B. G. × 3′ .							
	8′ × 22 B. G. × 3′ .							
	8′ × 24 B. G. × 3′ .							
	8′ × 22 B. G. × 4′ .							
Sheets, mild steel, galvanized, plain	8′ × 3′ 24 B. G. .	2 11 3 14	22 0 0	B	361 5 7	18 1 1	4-11-24	937 4 0
Sheets, mild steel, galvanized, plain	7′ × 3′ 24 B. G. .	0 5 1 22	27 2 6	B	430 6 5	21 8 3·68	8-11-24	117 3 4

Sheets, mild steel, galvanized, corrugated.	11′ × 10¾′ 18 B. G. .	117 13 2 22	22 5 0	B	349 12 4	17 7 9·8	7-5-24	41,163 5 0
Sheets, mild steel, galvanized, corrugated.	7′ × 22 B. G. 10/3 8′ × 24 B. G. 10/3 7′ × 24 B. G. 10/3 8′ × 24 B. G. 10/3	187 8 1 6	21 5 0	B	351 4 8	17 9 0·8	10-7-24	62,324 7 10
Sheets, mild steel, galvanized, corrugated.	6′, 7′ and 8′ × 33″ × 20 B. G	90 0 3 14	21 7 6	B	352 15 4	17 10 4·4	10-7-24	31,781 11 1
Sheets, mild steel, galvanized, corrugated.	11′-0″ radius 10′-9″ when straight, 2′-8″ in width out to out, 3″ pitch, 10 B. G. thick, depth of corrugation ¾″.	59 0 0 0	23 5 0	B	378 4 0	18 14 7·2	15-9-24	22,316 12 0
Sheets, mild steel, galvanized, corrugated.	3″ pitch No. 16 B G. 3″ „ „ 16 B.G. 3″ „ „ 16 B.G. 6′ × 2′-8″ 8′ × 2′-8″ 9′ × 2′-8″	35 19 2 0	19 17 6	B	332 12 0	16 10 2·4	29-10-24	11,970 10 11
Sheets, mild steel, galvanized, corrugated.	3″ × ½″ corrugations to cover 2′-11″ 22 G. × 7′ long.	0 15 1 8	23 0 0	B	374 14 5	18 11 11·05	8-11-24	287 3 3

Items.	Sizes.	Quantity imported.	Home price per ton in sterling.	F. O. B. Continental or British ports. British—B. Continental—C.	Price F. O. R. Bombay including Customs Duty and all other charges under rule 8.		Date of contract.	Total value.
					Per ton.	Per cwt.		
		T. c. q. lbs.	£ s. d.		Rs. A. P.	Rs. A. P.		Rs. A. P.
6.—PLATES AND SHEETS—*contd.*								
Sheets, mild steel, galvanized, corrugated.	3" × ¾" corrugations 7' × 2'-8" × 16 B. G., 9' × 2'-8" × 16 B. G.	32 18 3 21	19 17 6	B	332 12 9	16 10 2·4	8-11-24	10,964 9 10
Sheets, mild steel, galvanized, corrugated.	17 B. G. thick, 2'-5" out to out, length 11 feet, corrugations 3" × ¾".	101 17 1 0	18 19 3	B	320 7 4	16 0 4·4	7-2-25	32,642 10 1
Sheets, mild steel, roof, curved, corrugated.	19 B. G., 10'-5" (length in flat) 2'-8" out to out, pitch of corrugations 3", rise ¾".	8 10 1 0	23 5 0	B	363 3 9	18 2 7·05	4-7-24	3,092 0 6
Sheets, steel, close annealed, cold rolled, for panels	12' × 2'-6" × 14 B.G.	45 0 2 12	18 7 6	B	287 8 5	14 6 0·25	16-9-24	12,947 4 0

Sheets, steel, for floor plates.	9′-6″ × 4′-0″ × $\frac{3}{16}$″ 10′-0″ × 4′-0″ × $\frac{3}{16}$″.	150 12 1 0	8 2 6	C	159 5 4	7 15 5·6	2-10-24	20,406 9 6
Sheets, steel, for wagon roofs.	10′-0″ × 3′-0″ × $\frac{1}{16}$″	35 17 0 21	12 15 0	B	221 10 2	11 1 3·7	15-9-24	7,953 15 3
FABRICATED.								
Girders, bridge .	30 feet clear deck spans, complete.	114 0 0 0	14 5 0	B	335 0 6	16 12 0·3	10-7-24	38,193 9 0
Girders, bridge .	40 feet clear deck spans, complete.	326 12 0 0	14 5 0	B	367 2 0	18 5 8·4	10-7-24	1,19,903 0 5
Girders, bridge .	83 feet centres for bearings deck spans, complete.	212 0 0 0	13 6 0	B	260 5 5	13 0 3·25	9-9-24	55,191 12
Girders, single .	94′-6″ long and weighing 24$\frac{2}{3}$ tons.	370 0 0 0	16 8 6	B	396 1 11	19 12 10·75	23-4-24	1,46,504 5 2
Piles, steel, interlocking, Ransomes type 'D,' 'Light' section.	Weighing 17·56 lbs. per running foot, each pile 20 feet in length.	32 2 3 8	12 18 0	B	223 11 5	11 2 11·65	30-9-24	7,190 6 3
Mild steel Tee stanchions.	4″ × 3″ × $\frac{3}{8}$″ . .	11 16 1 8	15 17 6	B	262 1 3	12 9 3	16-10-24	2,978 9 3
Deck spans	52 feet with footway on one side.	84 0 0 0	15 12 0	B	311 5 4	15 9 0·8	20-3-25	26,152 0 0

*Holes to be drilled.

Statement showing prices paid by Director General, India Store Department, London, for Rolled Steel Sections calculated F. O. R. Bombay.

SUMMARY—1925-1926.

Items.	NON-FABRICATED.				Items.	FABRICATED.			
	BRITISH.		CONTINENTAL.			BRITISH.		CONTINENTAL.	
	Weight.	Value.	Weight.	Value.		Weight.	Value.	Weight.	Value.
	T. cwt. qr. lb.	Rs. A. P.	T. cwts. qrs. lbs.	Rs. A. P.		T. cwt. qr. lb.	Rs. A. P.	T. cwt. qr. lb	Rs. A. P.
Angles M. S.	136 13 2 0	21,195 9 3	...	...	Structural Steel.	5,020 3 3 27	17,68,538 13 1		
Channels M. S.	2 10 0 0	393 14 9	..	...					
Joists M. S.	246 1 3 22	37,016 10 1	...	..					
Tees M. S. .	15 1 2 22	2,827 4 1	500 0 0 0	69,304 11 0					
Bars and Rods M. S.	199 9 0 10	44,888 11 0	...	...					
Plates and Sheets M. S.	1,428 0 3 22	3,25,904 15 11	510 6 2 24	69,376 11 9					
Rails . .	1,180 13 0 8	1,60,028 4 4	...	...					

NON-FABRICATED.

1925-26.

Items.	Sizes.	Quantity imported.	Home price per ton in sterling.	F. O. B. Continental or British ports. British—B. Continental—C.	Price F. O. R. Bombay, including Customs Duty and all other charges under Rule 8.		Date of contract.	Total price F. O. R. Bombay.
					Per ton.	Per cwt.		
Angles, Channels, Joists and Tees.		T. cwts. qrs. lbs.	£ s. d.		Rs. A. P.	Rs. A. P.		Rs. A. P.
Angles, M. S.	2" × 2" × ¼"	0 10 0 0	9 5 0	B	174 5 4	8 11 5·6	23-4-25	87 2 8
Do.	2½" × 2½" × ¼"	2 2 0 0	8 12 6	B	165 14 6	8 4 8·7	23-4-25 and 14-5-25	348 6 5
Do.	(1) 4" × 3½" × ¾"	1 5 0 0	7 17 6	B	155 12 9	7 12 7·65	11-6-25	189 11 11
	(2) 6" × 3" × ⅜"							
Do.	(1) 2½" × 2½" × ¼"	8 0 0 0	7 17 6	B	155 12 9	7 12 7·65	11-11-25	1,246 6 0
	(2) 2½" × 2½" × ⅜"							
Do.	(1) 3 × 3" } × ⅜"	26 10 0 0	6 15 0	B	140 10 0	7 0 6	11-11-25	3,726 9 0
	(2) 3½" × 3½" } × ⅜"							
	(3) 4" × 4" } × ½"							
	(4) 6" × 4" } × ½"							

NON-FABRICATED—*contd.*

1925-26—*contd.*

Items.	Sizes.	Quantity imported.	Home price per ton in sterling.	F. O. B. Continental or British ports. British—B. Continental—C.	Price F. O. R. Bombay, including Customs duty and all other charges under Rule 8.		Date of contract.	Total price F. O. R. Bombay.
					Per ton.	Per cwt.		
		T. cwts. qrs. lbs.	£ s. d.		Rs. A. P.	Rs. A. P.		Rs. A. P.
Angles, Channels, Joints and Tees—contd.								
Angles, M. S.	1½″ × 1½″ } × ¼″ 1¾″ × 1¾″ } × ¼″ 2″ × 2″ × 5/16″	6 10 0 0	8 7 6	B	162 9 1	8 2 0·65	11-11-25	1,056 11 1
Angles, and Channels.	Angles, 2″ × 2″ × ¼″ (Angles, 10 tons). Channels, 6″ × 3″ × 12·41 lbs. (channels 2½ tons).	12 10 0 0	8 0 0	B	157 9 1	7 14 0.65	11-11-25	Angles. 1,575 10 10 Channels. 393 14 9
Angles, M. S. and tees.	(1) Angles, 3″ × 3″ × ¼″. (Angles—2¼ tons). (2) Angles, 2½″ × 2½″ × 5/16″. Tees, 3½″ × 3½″ and 3″ × 3″ × ⅜″ (Tees—6 Tons).	5 0 0	7 15 0	B	154 2 0	7 11 3·6	11-11-25	Angles. 346 12 6 Tees. 924 12 0

Angles, M. S.	$1\frac{1}{2}'' \times 1\frac{1}{2}'' \times \frac{1}{4}''$	63 19 2 0	8 5 0	B	160 13 6	8 0 8·1	26-11-25	10,289 15 8
Do.	$1\frac{1}{4}'' \times 1\frac{1}{4}'' \times \frac{3}{16}''$	1 10 0 0	8 10 0	B	164 2 10	8 3 4·1	5-12-25	246 4 3
Do.	$1\frac{1}{2}'' \times 1\frac{1}{2}'' \times \frac{3}{16}''$ and $1\frac{3}{4}'' \times 1\frac{3}{4}'' \times \frac{3}{16}''$.	3 0 0 0	8 2 6	B	159 2 11	7 15 4·15	5-12-25	477 8 9
Do.	$2\frac{1}{2}'' \times 2\frac{1}{2}'' \times \frac{1}{4}''$	3 0 0 0	6 17 6	B	142 4 8	7 1 10	5-12-25	426 14 0
Do.	$1\frac{1}{4}'' \times 1\frac{1}{4}'' \times \frac{1}{4}''$	1 10 0 0	8 5 0	B	160 13 6	8 0 8·1	5-12-25	241 4 3
Do.	$2\frac{1}{4}'' \times 2\frac{1}{4}'' \times \frac{1}{4}''$	3 0 0 0	7 5 0	B	147 5 11	7 5 10·75	20-1-26	442 1 9
Do.	(1) $3'' \times 3'' \times \frac{3}{8}''$ (2) $3\frac{1}{2}'' \times 3\frac{1}{2}'' \times \frac{3}{8}$ (3) $4'' \times 4'' \times \frac{3}{8}''$ (4) $4'' \times 4'' \times \frac{1}{2}''$	3 12 0 0	6 10 0	B	137 4 2	6 13 9·7	30-1-26	494 2 2
Tees, M. S.	$2\frac{1}{2}'' \times 2\frac{1}{2}'' \times \frac{3}{8}''$	0 10 0 0	9 7 6	B	175 5 3	8 12 3·15	11-6-25	87 10 8
Do.	$4'' \times 3'' \times \frac{3}{8}''$	8 11 2 22	12 0 0	B	211 6 5	10 9 1·45	20-12-25	1,814 13 5
Do.	$2'' \times 2'' \times \frac{1}{4}''$	500 0 0 0	6 12 0	C	138 9 9	6 14 10·65	16-2-26	69,304 11 0
Joists, rolled steel	$24 \times 7\frac{1}{2}''$	95 12 2 0	8 3 6	B	160 15 6	8 0 8·1	15-6-25	15,382 2 11
Do.	(1) $8'' \times 4''$ (2) $9'' \times 4''$ (3) $10'' \times 4\frac{1}{2}''$	3 0 0 1	6 10 0	B	137 4 2	6 13 9·7	5-2-26	411 13 6
Do.	$18'' \times 7''$	51 16 3 21	6 15 0	B	140 10 1	7 0 6·05	$\frac{24}{25}$-3-26	7,291 3 9
Do.	$24'' \times 7\frac{1}{2}''$	95 12 2 0	7 2 6	B	145 11 0	7 4 6·6	25-3-26	13,931 5 11
Bars and rods.								
Bars flat (steel)	$2'' \times 1\frac{1}{2}''$	7 12 2 0	28 10 0	B	441 4 8	22 1 0·4	27-5-25	3,364 13 7

NON-FABRICATED—*contd.*

1925-1926—contd.

Items.	Sizes.	Quantity imported.				Home price per ton in sterling.			F. O. B. Continental or British ports. British—B. Continental—C.	Prices F. O. R. Bombay, including Customs Duty and all other charges under Rule 8.						Date of contract.	Total price F. O. R. Bombay.		
										Per ton.			Per cwt.						
		Tons	cwts.	qrs.	lbs.	£	s.	d.		Rs.	A.	P.	Rs.	A.	P.		Rs.	A.	P.
Bars and Rods—contd.																			
Bars, flat and round, M. S.	1″ × ¼″ and 1¼″ × ¼″	0	13	2	0	20	0	0	B	333	6	11	16	10	8·95	27-5-25	225	1	1
Bars, flat, M. S.	2″ × ⅜″ × 3″ × ½″	0	10	0	0	10	0	0	B	194	7	2	9	11	6·7	27-5-25	97	3	7
„ round, M. S.	¾″, 1¾″ and 2½″	0	8	3	26	10	10	0	B	201	3	0	10	0	11·4	27-5-25	90	5	8
„ flat, M. S.	6½″ × ¾″, 12″ × ⅝″ and 12″ × ½″.	5	0	0	0	8	7	6	B	172	8	7	8	10	0·35	11-6-25	862	10	11
„ square, M. S.	4″	1	0	0	0	9	10	0	B	187	0	8	9	5	7·6	11-6-25	187	0	8
Rods, M. S.	¼″	20	0	0	0	11	0	0	B	207	14	10	10	6	4·1	12-6-25	4,158	8	8
Bars, M. S., Galvd.	1½″ × ¼″	10	0	0	0	16	17	6	B	265	2	2	13	4	1·3	24-6-25	2,651	5	8
„ round	5″	0	12	0	0	9	7	6	B	186	0	3	9	4	9·75	20-7-25	111	9	9

,, flat and round	(1) Round, ¼″, ⅜″, ½″, ¾″, 1″, 1¼″ and 1½″. (2) Flat, 2″, ⅛″, 1½″ × ¼″, 2″ × ¼″, 2¼″ × ⅜″ and 2½″ × ½″.	3 1 0 0	10 5 0	B	197 13 7	9 14 3·35	25-7-25	603 7 0
,, square .	4½″ . . .	2 0 0 0	9 0 0	B	180 15 4	9 0 9·2	21-10-25	351 14 8
,, flat . .	4½″ × 4⅜″, 6¼″ × 4½″, 5¾″ × 5″, 6⅜″ × 5″.	17 5 0 0	10 10 0	B	201 2 11	10 0 11·35	21-10-25	3,470 6 4
,, round . .	3½″ × 1¾″ . .	4 0 0 0	8 10 0	B	174 3 9	8 11 4·65	24-10-25	696 15 0
M. S. rounds .	4″. . . .	4 0 0 0	12 10 0	B	228 2 0	11 6 6	24-10-25	912 8 0
Ditto .	2¼″ × 2½″. . .	12 0 0 0	9 0 0	B	180 15 4	8 0 9·2	24-10-25	2,171 8 0
M. S. squares .	6″	5 0 0 0	8 0 0	B	167 8 3	8 6 0·15	24-10-25	837 9 3
,, rounds .	⅞″, 1″, 1¼″, 1½″, 1⅝″, 1¾″ and 1⅞″.	17 0 0 0	14 0 0	B	248 6 5	12 6 8·65	29-10-25	4,222 13 1
,, hexagonal .	92, 1·3, 1·48 and 2·05	2 18 0 0	15 0 0	B	261 13 7	13 1 5·75	29-10-25	759 5 10
,, rounds . .	5/16″ and ⅜″ . .	14 0 0 0	9 5 0	B	184 8 3	9 3 7·35	11-11-25	2,583 3 6
,, flats and rounds.	Flat, ¾″ × ¼″, round ¼″.	7 12 0 0	9 15 0	B	191 1 1	9 8 10·25	11-11-25	1,452 1 10

NON-FABRICATED—*contd.*

1925-26—*contd.*

Items.	Sizes.	Quantity imported.	Home price per ton in sterling.	P. O. B. Continental or British ports. British—B. Continental—C.	Price F. O. R. Bombay, including Customs Duty and all other charges under Rule 8.		Date of contract.	Total price F. O. R. Bombay.
					Per ton.	Per cwt.		
		Tons cwts. qrs. lbs.	£ s. d.		Rs. A. P.	Rs. A. P.		Rs. A. P.
Bars and Rods—contd.								
Bars, flats, rounds, and squares.	(1) Square. ¾″, 1″, 1⅛″, 1½″, 2″ and 2½″.	2 18 0 0	7 15 0	B	164 2 0	8 3 3·6	11-11-25	475 15 5
	(2) Round, ⅝″, ¾″, ⅞″, 1″, 1⅛″, 1¼″, 1⅜″, 1½″, 2⅝″, 1¾″, 1⅞″, 2″ and 2½″.							
	(3) Flats, ¼″ × (1¼″, 1½″, 1¾″, 2″, 2½″ and 4″), ⅜″ × (1½″, 2″ × 2½″, 3″, 4″), ½″ × (1¾″, 2″ × 2½″, 3″ and 4″), ⅝″ × (2″, 2½″, 3″ and 5″), ¾″ × 2″, 2″ × 1″, 3″ × 1″, 4″ × 1¼″ and 2½″ × 1½″.							

„ flats	3⅜″	8 4 1 0	8 5 0	B	170 13 6	8 8 8·1	13-11-25	1,403 0 10
„ hexagonal planished.	⅝″, ⅞″, 1″, 1¼″	14 13 0 0	15 5 0	B	249 2 11	12 7 4·15	17-11-25	3,650 8 4
„ flat	3⅜″ × 20 B. G.	1 5 0 0	15 10 0	B	268 9 7	13 6 10·55	20-1-26	335 12 0
„ squares	⅞″	0 10 0 0	17 0 0	B	228 13 2	14 7 0·7	20-1-26	144 6 7
M. S. Round	5/16″	0 5 0 0	33 0 0	B	508 11 3	25 6 11·55	20-1-26	127 2 10
M. S. Round	1″, 1⅛″, 1½″, 2½″, and 3″.	0 11 0 0	25 0 0	B	400 13 7	20 0 8·15	20-1-26	220 7 6
M S. Round	¼″	0 1 0 0	30 0 0	B	468 4 2	23 6 7·3	23-1-26	23 6 7
M. S. Flat	1½″ × ¼″, 1½″ × ⅜″	0 7 0 0	16 10 0	B	282 3 1	14 1 9·05	23-1-26	98 12 3
M. S. Flat and round.	(1) flat, 2″ × ½″, 2″ × ¾″, 2½″ × ¼″, 4″ × ½″; (2) Round, 1″, 1⅛″ and 1½″.	0 19 0 18	8 12 6	B	175 14 7	8 12 8·75	23-1-26	168 8 9
M. S. Flat and rolled.	4½″ × 4⅜″	5 0 0 0	12 15 0	B	231 8 5	11 9 2·65	28-1-26	1,157 10 1
M. S. hexagonal	·69 × ·601	2 10 0 0	16 10 0	B	282 1 4	14 1 8	1-2-26	705 3 4
M. S. special	3¾″ × 1⅞″ × ¾″	14 4 2 11	12 4 2	B	224 3 6	11 3 4·5	4-2-26	3,190 9 10

NON-FABRICATED—*contd.*

1925-26—*contd.*

Items.	Sizes.	Quantity imported.	Home price per ton in sterling.	F. O. B. Continental or British ports. British—B. Continental—C.	Price F. O. R. Bombay, including Customs Duty and all other charges under Rule 8.		Date of contract.	Total price F. O. R. Bombay.
					Per ton.	Per cwt.		
		Tons. cwts. qrs. lbs.	£ s. d.		Rs. A. P.	Rs. A. P.		Rs. A. P.
Bars and Rods—contd.								
M. S. flat, round and square.	(1) Sq., $3\frac{5}{8}''$, $\frac{3}{4}''$, $1''$, $1\frac{1}{4}''$ and $1\frac{1}{2}''$; (2) Rd., $\frac{5}{8}''$, $1\frac{3}{8}''$, $2\frac{1}{4}''$, $2\frac{3}{4}''$ and $3''$ (3) Flat; $\frac{5}{8}'' \times \frac{1}{2}''$, $\frac{7}{8}'' \times \frac{3}{8}''$, $1'' \times \frac{5}{16}''$, $1\frac{1}{4}'' \times \frac{1}{2}''$, $\frac{5}{8}'' \times \frac{3}{8}''$, $\frac{5}{8}'' \times \frac{1}{2}''$, $\frac{7}{8}'' \times \frac{3}{8}''$, $1'' \times \frac{5}{16}''$, $1'' \times \frac{3}{8}''$, $1\frac{1}{8}'' \times \frac{1}{4}''$, $1\frac{1}{4}'' \times \frac{1}{4}''$, $1\frac{1}{4}'' \times \frac{3}{8}''$, $1\frac{1}{4}'' \times \frac{5}{8}''$, $1\frac{1}{2} \times \frac{1}{2}''$, $1\frac{3}{4}'' \times \frac{1}{4}''$, $1\frac{3}{4}'' \times \frac{1}{2}''$, $2\frac{1}{2}'' \times \frac{1}{2}''$, $2\frac{1}{2}'' \times \frac{3}{4}''$, $3'' \times \frac{1}{4}''$, $4'' \times \frac{1}{4}''$, $6'' \times \frac{1}{2}''$.	2 18 2 16	20 0 0	B	329 4 4	16 7 5	12-2-26	965 7 6
M. S. flat . .	$\frac{1}{4}'' \times \frac{3}{4}''$, $\frac{1}{4}'' \times 1\frac{1}{2}''$, $\frac{3}{8}'' \times 1\frac{1}{2}''$.	1 7 1 5	17 10 0	B	295 9 0	14 12 5·4	17-2-26	403 5 10

M. S. flat and round.	(1) Round, $\frac{3}{4}$″, 1″, 1$\frac{1}{8}$″, 1$\frac{1}{2}$″; (2) Flat, 2″ × $\frac{3}{8}$″, 2″ × $\frac{1}{2}$″, 2″ × $\frac{3}{4}$″, 2$\frac{1}{2}$″ × $\frac{1}{4}$″, 3″ × $\frac{3}{8}$″ and 4″ × $\frac{1}{2}$″.	1 8 2 2	8 15 0	B	177 8 8	8 14 0·4	17-2-26	253 2 6
M. S. boring octagonal mines.	1$\frac{1}{8}$″ . . .	0 7 0 16	35 7 0	B	550 6 11	27 8 4·15	6-3-26	196 9 4
M. S. round .	$\frac{13}{16}$″ . . .	1 1 3 0	21 0 0	B	346 14 8	17 5 6·4	15-3-26	377 4 4
Steel bars flat .	17″ × 7$\frac{1}{2}$″ . .	6 4 3 0	9 10 0	B	187 11 4	9 6 2	15-3-26	1,170 13 4
Plates and Sheets.								
Sheets M. S. .	6′ × 3″ × 13, 15, 16 and 23 B. G.	19 3 1 10	12 0 0	B	211 6 7	10 9 1·55	4-4-25	4,052 1 11
Sheets and Plates M. S.	6′ × 4′ × $\frac{1}{16}$″ . .	1 0 0 9	12 10 0	B	218 2 5	10 14 6·25	23-4-25	219 0 6
Sheets, black M. S.	8′ × 4′ × 16 B. G. .	2 0 3 23	12 0 0	B	211 6 7	10 9 1·55	15-5-25	432 14 9
Sheets, black M. S.	6′ × 2′ × $\frac{1}{32}$″ . .	0 10 0 0	13 10 0	B	231 10 9	11 9 4·05	29-6-25	5 12 8
Plates, M. S. .	12$\frac{1}{2}$′ × 4′ × $\frac{1}{8}$″ . .	5 19 2 3	9 17 6	B	182 11 9	9 2 2·25	22-7-25	1,092 2 7
Plates, M. S. .	9$\frac{1}{2}$′ × 4′ × $\frac{3}{16}$″ . .	136 5 1 13	10 7 6	B	189 7 4	9 7 6·8	18-9-25	25,817 2 9
Plates, M. S. .	9$\frac{1}{2}$″ × 6′ × $\frac{1}{2}$″ × 10′ × 7′ × $\frac{9}{16}$″, 11′ × 5$\frac{1}{2}$′ × $\frac{9}{16}$″, 9′ × 10$\frac{1}{2}$″ × 2′ × 1$\frac{1}{2}$″, 6′ × 3′ × $\frac{9}{16}$″.	3 11 2 23	12 5 0	B	214 12 8	10 11 10	25-9-25	770 1 4

NON-FABRICATED—*contd.*

1925-26—*contd.*

Items.	Sizes.	Quantity imported.	Home price per ton in sterling.	F. O. B. Continental or British ports. British—B. Continental—C.	Price F. O. R. Bombay, including Customs Duty and all other charges under Rule 8.		Date of contract.	Total price F. O. R. Bombay.
					Per ton.	Per cwt.		
Plates and Sheets—contd.		Tons. cwts. qrs. lbs.	£ s. d.		Rs. A. P.	Rs. A. P.		Rs. A. P.
Plates, steel	$5\frac{3}{4}' \times 5\frac{3}{4}' \times \frac{7}{8}''$, $7\frac{3}{4}'' \times 7\frac{1}{4}'' \times 1''$, $9' \times 4'\ 10\frac{1}{2}'' \times \frac{1}{2}''$, $10' \times 4\frac{1}{2}' \times \frac{1}{2}''$, $19\frac{1}{6}' \times 7' \times \frac{7}{16}'' \times \frac{9}{16}''$, $10' \times 6' \times \frac{7}{16}''$, $10'\ 3\frac{3}{8}'' \times 4'\ \frac{3}{8}'' \times \frac{7}{16}''$.	22 17 0 22	12 5 0	B	214 12 8	10 11 10	25-9-25	4,802 11 3
Sheets, M. S.	$8' \times 4' \times \frac{1}{8}''$	25 0 1 0	9 10 0	B	177 10 11	8 4 1·75	21-10-25	444 4 5
Sheets, M. S.	$8' \times 4' \times \frac{3}{32}''$	1 0 2 7	10 5 0	B	189 12 8	9 7 10	21-10-25	195 2 1
Sheets, M. S.	$8' \times 4' \times \frac{1}{16}''$	15 0 2 20	11 0 0	B	197 14 5	9 14 3·85	21-10-25	2,975 0 11
Plates, M. S.	$8' \times 4' \times \frac{3}{16}''$, $\frac{1}{4}''$, $\frac{5}{16}''$, $\frac{3}{8}''$, $\frac{1}{2}''$, $\frac{3}{4}''$, $\frac{7}{8}''$ and $1''$, $12' \times 4' \times \frac{1}{4}''$.	179 9 1 22	6 10 0	C	137 3 9	6 13 9·45	2-11-25	24,588 12 1
Plates, M. S.	$16\frac{2}{3}' \times 6\frac{1}{4}' \times \frac{17}{32}''$	3 3 2 0	12 10 0	B	218 2 5	10 14 6·25	2-11-25	692 10 1

Plates, M. S.	$20' \times 4\frac{1}{2}'' \times \frac{1}{4}''$ . .	19 7 1 3	8 0 0	B	157 8 3	7 14 0·15	2-11-25	3,050 1 8
Plates, M. S.	$6\frac{1}{2}' \times 3\frac{1}{2}' \times \frac{1}{4}''$ . .	13 1 0 6	9 15 0	B	181 1 1	9 0 10·25	2-11-25	2,363 6 8
Plates, M. S.	$6' \times 7' \times \frac{5}{16}''$ . .	4 6 2 12	8 7 6	B	162 9 1	8 2 0·65	3-11-25	703 15 8
Plates, M. S.	$4' \times 8' \times \frac{3}{8}''$ . .	17 0 3 10	7 17 6	B	155 12 8	7 12 7·6	3-11-25	2,654 15 11
Plates, M. S. .	$\frac{1}{2}'' \times 4\frac{1}{3}''$ and $\frac{1}{2}'' \times 5\frac{1}{12}'$	10 18 2 15	13 7 6	B	229 14 5	11 7 11·05	3-11-25	2,315 4 5
Plates, M. S. .	$\frac{3}{16}'' \times 6' \times 3'$, $3\frac{1}{2}'$ and $2\frac{1}{2}'$.	2 10 3 1	8 0 0	B	157 8 3	7 14 0·15	16-11-25	434 9 3
Sheets, M. S. .	$6' \times 3' \times 20$ B. G. .	1 10 1 2	12 0 0	B	211 6 7	10 9 1·55	18-11-25	319 15 2
Sheets, M. S. .	$6' \times 3' \times 8$ B. G. .	1 16 3 0	9 17 6	B	182 11 9	9 2 2·25	18-11-25	335 12 4
Plates, M. S. .	$16' \times 5\frac{3}{4}' \times \frac{17}{32}''$ . .	5 14 1 14	12 3 0	B	213 7 4	10 10 9·2	18-11-25	1,220 11 4
Sheets, M. S. .	$6' \times 3' \times 22$ B. G. and 24 B. G.	2 12 1 27	12 15 0	B	221 8 2	11 1 2·5	18-11-25	583 5 10
Sheets, M. S. .	$\left.\begin{matrix}(4' \times 12') \\ (3\frac{1}{2}' \times 7')\end{matrix}\right\} \times \frac{1}{16}''$.	29 6 0 12	10 0 0	B	184 7 4	9 3 6·8	19-11-25	5,405 9 10
Sheets, M. S. .	$\frac{1}{8}'' \times \left\{\begin{matrix}2'\,5'' \times 12' \\ 3' \times 9' \\ 4' \times 8' \\ 4' \times 12'\end{matrix}\right\}$	138 16 3 6	6 17 6	C	142 4 8	7 1 10	19-11-25	19,755 12 10
Plates, M. S. .	$\frac{3}{16}'' \times 2'\,5'' \times 7\frac{1}{2}''$, $\frac{1}{4}'' \times 4' \times 12'$, $\frac{3}{8}'' \times 4' \times 8'$, $\frac{3}{8}'' \times 4' \times 12'$, $\frac{1}{2}'' \times 4' \times 8'$.	192 0 1 24	6 7 6	C	135 9 1	6 7 5·45	19-11-25	26,032 2 10

NON-FABRICATED—*contd.*

1925-26—*contd.*

Items.	Sizes.	Quantity imported.	Home price per ton in sterling.	F. O. B. Continental or British ports. British—B. Continental—C.	Price F. O. R. Bombay, including Customs Duty and all other charges under Rule 8.		Date of contract.	Total price F. O. R. Bombay.
					Per ton.	Per cwt.		
		Tons cwts. qrs. lbs.	£ s. d.		Rs. A. P.	Rs. A. P.		Rs. A. P.
Plates and Sheets —contd.								
Plates, M. S. .	$\frac{3}{8}''$ × 8′ × 3′ 12′ × 3′ 8′ × 4′ 12 × 4′	50 4 0 13	6 14 6	B	140 4 8	7 0 2·8	3-12-25	7,043 7 3
Plates, M. S. .	$\frac{5}{16}''$ × 8′ × 3′ 12′ × 3′ 8′ × 4′ 7′ × 4′ 12′ × 4′	54 15 1 6	6 19 6	B	143 10 0	7 2 10·8	3-12-25	7,865 10 4

Plates, M. S. .	¼" × { 8' × 3' 12' × 3' 8' × 4' 12' × 4' }	28 17 2 26	7 4 6	B	147 0 3	7 5 7·35	3-12-25	4,246 12 6
Plates, M. S. .	3/16" × { 8' × 3' 12' × 3' 8' × 4' 12' × 4' }	25 2 0 9	7 12 6	B	152 7 4	7 9 11·6	3-12-25	3,827 5 0
Sheets, M. S., for welding.	6' × 3' × 14 & 16 S. W. G.	0 10 1 23	30 0 0	B	458 4 2	22 14 7·3	11-2-26	239 8 1
Sheets, M. S. .	6' × 3' × 16 B. G. .	2 0 1 23	11 2 6	B	199 9 10	9 15 8·3	24-2-26	403 12 5
Plates, M. S. .	⅜" × 7' × 4', 6' × 3', 7' × 3.'	1 3 0 26	7 0 0	B	144 0 0	7 3 2·4	24-2-26	167 4 4
Sheets, M. S. .	6' × 3' × 22 S. W. G.	0 4 0 5	36 0 0	B	539 2 5	26 15 3·85	28-1-26	109 0 6
Sheets, M. S., annealed.	8' × 4' × 14 B. G. .	40 0 2 16	16 17 6	B	267 2 2	13 5 8·5	8-5-25	10,695 14 6
Sheets, M. S., annealed.	8' × 4' × 14 B. G. .	96 1 1 3	17 19 6	B	281 15 4	14 1 6·8	8-10-25	27,086 0 0
Sheets, M. S., annealed.	12' × 2½' × 14 B. G. .	45 0 2 12	18 0 0	B	282 5 7	14 1 10·55	8-10-25	12,715 12 6
Sheets, M. S., annealed.	16 S. W. G. { 12' × 2' 7⅛" 10½' × 2' 7⅛" }	8 0 0 1	18 7 6	B	287 5 7	14 5 10·55	26-10-25	2,298 14 9

NON-FABRICATED—*contd.*

1925-26—*contd.*

Items.	Sizes.	Quantity imported.	Home price per ton in sterling.	F. O. B. Continental or British ports. British—B. Continental—C.	Price F. O. R. Bombay, including Customs Duty and all other charges under Rule 8.		Date of contract.	Total price F. O. R. Bombay.
					Per ton.	Per cwt.		
		Tons cwts. qrs. lbs.	£ s. d.		Rs. A. P.	Rs A. P.		Rs. A. P.
Plates and Sheets—contd.								
Sheets, M. S., annealed.	16 S. W. G. 9′0½″ × 2′4¾″ 9′0½″ × 2′6¼″ 9′ × 2′7⅛″ 7′ × 2′7⅛″	50 17 2 3	17 17 6	B	280 9 1	14 0 5·45	26-10-25	14,274 4 1
Sheets, M., S. annealed.	3/32″ × 12′ × 2⅔′ . .	76 19 1 6	18 7 0	B	287 0 3	14 5 7·35	24-11-25	22,030 3 2
Sheets, M. S., annealed.	3/32″ × 8½′ × 3′ 5½″ .	6 8 2 9	17 17 0	B	280 3 9	14 0 2·25	24-11-25	1,801 10 1
Sheets, M. S., annealed.	3/32″ × 12′ × 2⅔′ .	175 0 0 0	16 15 0	B	265 7 3	13 4 4·35	25-3-26	46,454 4 9

Sheets, M. S., galvd.	22 B. G. × 7′ × 3′ .	2 0 0 23	21 15 0	B	362 0 6	18 1 7·5	15-5-25	727 12 6
Sheets, M. S., galvd.	22 B. G. × 8′ × 4′ .	1 0 0 0	22 10 0	B	272 2 4	18 9 8·6	29-6-25	372 2 4
Sheets, M. S., galvd.	20 & 22 B. G. × 7′ × 3′	6 0 1 5	19 10 0	B	327 8 5	16 6 0·25	29-6-25	1,969 15 8
Sheets, M. S., galvd.	22 & 24 B.G. × 8′ × 3′	5 7 3 26	20 5 0	B	341 13 0	17 1 5·4	29-6-25	1,845 7 8
Sheets, M. S., galvd.	22 B. G. × 7′ × 6′ . 24 B. G. × 9′ × 7′ . 24 B. G. × 9′ × 6′ .	131 10 1 16	19 5 0	B	324 2 6	16 3 3·9	29-6-25	42,628 3 2
Sheets, M. S., galvd.	18 B. G. × 10′ × $2\frac{2}{3}$′ (3″ × $\frac{3}{4}$″ corrugations.)	20 11 0 0	18 5 0	B	310 10 10	15 8 6·5	21-8-25	6,384 6 7
Sheets, M. S., galvd.	20 B. G. × 32″ × (6′, 7′ & 8′).	125 0 1 2	18 5 0	B	310 10 10	15 8 6·5	9-10-25	38,838 12 9
Sheets, M. S., galvd.	12′ × $2\frac{2}{3}$′ × $\frac{3}{32}$″ . .	5 5 0 4	29 0 0	B	459 12 8	22 15 10	9-11-25	2,409 7 7
Sheets, M. S., galvd.	8′ × 3′ × $\frac{1}{32}$″ . .	7 0 0 0	18 6 6*	...	294 7 4	14 11 6·8	10-11-25	2,061 3 4
Sheets, M. S., galvd.	8′ × 3′ × $\frac{1}{16}$″ . .	8 0 0 0	15 10 3*	...	256 15 4	12 13 6·8	10-11-25	2,055 10 8
Sheets, M. S., galvd.	$12\frac{1}{2}$′ × $2\frac{1}{2}$′ × $\frac{3}{32}$″	5 0 1 20	14 17 3*	...	248 4 8	12 6 7·6	10-11-25	1,246 12 6
Sheets, M. S., galvd.	9′ × 3′ × (10, 16, 1 & 20 S. W. G.)	0 12 3 18	20 0 0	B	335 15 0	16 12 9	12-2-26	216 9 1

* C. I. F. quotation.

NON-FABRICATED—*concld.*

1925-26—*concld.*

Items.	Sizes.	Quantity imported.	Home price per ton in sterling.	F. O. B. Continental or British ports. British—B. Continental—C.	Price F. O. R. Bombay, including Customs Duty and all other charges under Rule 8.		Date of contract.	Total price F. O. R. Bombay.
					Per ton.	Per cwt.		
		Tons cwt. qrs. lbs.	£ s. d.		Rs. A. P.	Rs. A. P.		Rs. A. P.
Sheets, M. S., lead coated.	22 & 24 S. W. G.	0 15 0 0	27 10 0	B	434 0 1	21 11 2·45	4-6-25	325 8 0
Sheets, M. S., lead coated.	26 S. W. G. × 6′ × 3′.	2 9 3 27	29 0 0	B	456 4 1	22 13 0·05	16-2-26	1,140 6 11
Sheets, expanded, steel.	6′L.W.M. × 8′S.W.M. ⅜″ mesh × $3\frac{3}{32}$″ × 18 G Bare.	1 1 2 18	28 14 4	B	461 8 6	23 0 11·1	26-10-25	499 7 3
Sheets, tinned	22 & 24 S. W. G.	1 2 0 0	59 10 0	B	896 13 9	44 13 5·85	4-6-25	986 8 4
Railway Materials.								
Rails, steel	18 lbs. F. F. rails	96 8 2 8	8 12 6	B	173 6 6	8 10 8·7	31-8-25	16,720 10 11
Rails, steel	for 60 lbs. F. F. rails, 36′ long.	707 0 0 0	7 4 6	B	128 6 6	6 6 8·7	1-8-25	90,783 8 6
Rails, steel	B. S. 35 lbs. F. F. section in 30 ft. lengths.	3 2 2 0	10 0 0	B	165 15 4	8 4 9·2	23-10-25	518 9 11
Rails, steel	B. S. 100 lbs. B. H. section in 36 ft. lengths.	374 2 0 0	8 0 0	B	139 0 3	6 15 2·55	23-10-25	52,005 11 11

FABRICATED.

1925-1926.

Items.	Sizes.	Quantity imported.	Home price per ton in sterling.	F. O. B. Continental or British ports. British—B. Continental—C.	Price F. O. R. Bombay, including Customs Duty and all other charges under Rule 8.		Date of contract.	Total Value F. O. R. Bombay.
					Per ton.	Per cwt.		
		Tons cwts. qrs. lbs.	£ s. d.		Rs. A. P.	Rs. A. P.		Rs. A. P.
FABRICATED.								
Structural Steel.								
Girders, single .	94½′ long . .	1,290 0 0 0	15 3 6	B	337 8 3	16 14 0·15	9-12-25	4,35,395 2 6 Heavy weight.
Girders, plain .	32′ 3⅛″ long . .	6 13 3 4	18 13 9	B	359 4 0	17 15 4·8	9-12-25	2,403 2 0
Ridging, M. S. .	30″ girth 7′ × 24-B. G.	1 17 3 8	20 9 8	B	374 15 1	18 11 11·45	29-6-25	709 0 8
Spans, deck .	84′ long . .	220 0 0 0	15 14 9	B	355 5 10	17 12 3·5	22-4-25	78,180 3 4 Heavy weight.
Spans, deck .	40′ long . .	431 2 2 15	13 7 3	B	269 11 10	13 7 9·5	3-7-25	1,16,293 4 6
Spans, deck .	60′ long . .	122 0 0 0	14 10 0	B	297 0 6	14 13 7·5	8-8-25	36,237 13 0
Spans, through .	138¾′ long . .	2 483 9 3 0	15 10 0	B	378 13 4	18 15 0·8	11-5-25	9,40,827 13 6·8 Heavy weight.
Spans, through .	100′ long . .	465 0 0 0	15 2 6	B	340 13 6	17 0 8·1	14-12-25	1,58,492 5 6

Statement showing prices paid by the Director General, India Store Department, London, for Rolled Steel Sections calculated F. O. R., Bombay.

SUMMARY—APRIL, MAY AND JUNE 1926.

—	NON-FABRICATED.				FABRICATED.			
	BRITISH.		CONTINENTAL.		BRITISH.		CONTINENTAL.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Tons cwts. qrs. lbs.	Rs. A. P.	Tons cwts. qrs. lbs.	Rs. A. P.	T. c. qrs. lbs.	Rs. A P.	T. c. qr. lbs.	Rs. A. P.
Angles, M. S.	95 14 3 24	14,984 9 3	60 0 0 0	8,447 8 0 Rails, steel F. F. of B. S. 75 Section. The holing is to be as detailed in B. S. specn.	...	...	...	...
Joists, R. S.	530 5 0 20	74,027 7 10	...	...	2,946 10 0 0	3,67,698 10 4	...	...
Flats, M. S.	7 15 3 8	3.118 8 11	275 0 0 0	41,467 11 4	...	...	...	...
Rounds and half Rounds, M. S.	40 0 0 0	7,526 8 7	572 0 0 0	86,252 13 4	...	...	...	...
Squares, M. S.	...	...	19 0 0 0	2,865 0 8	...	...	...	...
Plates and Sheets, M. S.	58 16 1 21	15,568 13 3	445 14 0 0	65,613 8 1	...	...	...	...
Sheets, M. S., galvanized, corr. and plain.	150 1 0 24	67,761 0 2	266 15 0 0	76,852 14 11	...	...	...	...
Wind Ties, M. S., galvanized.	6 0 0 0	1,471 6 6	...	...	...	...	...	...

April, May and June 1926.

Items.	Sizes.	Quantity imported.	Home price per ton in sterling.	F. O. B. Continental or British ports. British—B. Continental—C.	Price F. O. R. Bombay, including Customs Duty and all other charges under Rule 8.		Date of contract.	Total value.
					Per ton.	Per cwt.		
		Tons cwts. qrs. lbs.	£ s. d.		Rs. A. P.	Rs. A. P.		Rs. A. P.
NON-FABRICATED.								
Angles, M.S. .	1½″ × 1½″ × ¼″. .	83 7 2 27	7 17 6	B	155 15 4	7 12 9	17-4-26	13,004 14 6
	1½″ × 1½″ × ¼″. .	11 1 3 27	8 2 6	B	159 4 8	7 15 5	17-4-26	1,768 1 0
	1½″ × 1½″ × ¼″. .	20 0 0 0	6 15 0	C	140 12 8	7 0 8	1-6-26	2,815 13 4
	1½″ × 1½ × ¼″ . .	1 5 0 26	8 15 0	B	167 11 9	8 6 2	3-6-26	211 9 9
	2″ × 2″ × ¼″ . .	25 0 0 0	6 15 0	C	140 12 8	7 0 8	1-6-26	3,519 12 8
	2½″ × 2½″ × ¼″ .	5 0 0 0	6 15 0	C	140 12 8	7 0 8	1-6-26	703 15 4
	2″ × 2″ × ⅜″ . .	10 0 0 0	6 15 0	C	140 12 8	7 0 8	1-6-26	1,407 14 8
Joists, R. S.	4¾″ × 1¾″ × 35′ .	10 0 0 0	7 4 6	B	147 2 11	7 5 9	9-6-26	1,471 13 2
	4″ × 3″ × 36′ . .	17 2 2 12	7 0 0	B	144 2 7	7 3 4	21-5-26	2,469 8 7
	6″ × 3″ × 36′ . .	189 13 1 16	6 10 0	B	137 6 9	6 13 11	21-5-26	26,064 11 10

April, May and June 1926—contd.

Items.	Sizes.	Quantity imported.	Home price per ton in sterling.	F. O. B. Continental or British ports. British—B. Continental—C.	Price F. O. R. Bombay, including Customs Duty and all other charges under Rule 8.		Date of contract.	Total value.
					Per ton.	Per cwt.		
		Tons cwts. qrs. lbs.	£ s. d.		Rs. A. P.	Rs. A. P.		Rs. A P.
NON-FABRICATED —*contd.*								
Joists, R. S.—*contd.*	9″ × 4″ × 36′ . .	112 11 1 16	6 10 0	B	137 6 9	6 13 11	21-5-26	15,469 8 3
	6″ × 5″ × 35′ . .	10 0 0 0	6 14 6	B	140 7 4	7 0 6	9-6-26	11,938 15 4
	8″ × 5″ × 35′ . .	75 0 0 0						
	10″ × 5″ × 12′ . .	2 1 0 0	6 7 6	B	135 11 9	6 12 7	9-4-26	892 7 2
	12″ × 5″ × 17′ .	4 10 2 0						
	12″ × 6″ × 35′ . .	35 0 0 0	6 14 6	B	140 7 4	7 0 6	9-6-26	4,916 0 8
	18″ × 7″ × 32′ . .	54 12 3 12	7 0 0	B	144 2 7	7 3 4	23-4-26	7,877 6 2
	22″ × 7″ × 36′ . .	12 5 3 16	7 5 0	B	147 8 6	7 6 0	28-5-26	1,813 13 3
	24″ × 7½″ × 36′ . .	7 7 2 4	7 10 0	B	150 14 6	7 8 9	28-5-26	1,113 3 5

Flats, M. S.	1¼″ × ¼″	6 0 0 0	6 15 0	C	150 12 8	7 8 8	1-6-26	18,095 0 0
	1½″ × ¼″	25 0 0 0						
	1¾″ × ¼″	4 0 0 0						
	2″ × ¼″	12 10 0 0						
	1½″ × ⅜″	30 0 0 0						
	2″ × ⅜″	25 0 0 0						
	2½″ × ⅜″	17 10 0 0						
	3″ × ⅜″	13 1 0 4	8 10 0	B	174 6 5	8 11 6	17-4-26 and 3-6-26	2,276 3 11
Flats, M. S.	3″ × ⅜″	4 14 3 4	8 15 3	B	177 11 9	8 14 2	17-4-26	842 5 0
Flats, M. S.	3″ × ⅜″	7 10 0 0	6 15 0	C.	150 12 8	7 8 8	1-6-26	23,372 11 4
	2″ × ½″	25 0 0 0						
	2½″ × ½″	17 10 0 0						
	3″ × ½″	12 10 0 0						
	1½″ × ⅝″	6 0 0 0						
	2″ × ⅝″	10 0 0 0						
	1¼″ × ¾″	9 0 0 0						
	2″ × ¾″	5 0 0 0						
	2½″ × ¾″	20 0 0 0						
	3″ × ¾″	15 0 0 0						
	2″ × 1″	10 0 0 0						
	3″ × 1″	17 10 0 0						

April, May and June 1926—contd.

Items.	Sizes.	Quantity imported.				Home price per ton in sterling.	F. O. B. Continental or British ports British—B Continental—C.	Price F. O. R. Bombay including customs duty and all other charges under Rule 8.		Date of Contract.	Total value.
								Per ton.	Per cwt.		
		T.	cwt.	qr.	lbs.	£ s. d.		Rs. A. P.	Rs. A. P.		Rs. A. P.
Rod, M. S.	¼″ dia.	20	0	0	0	10 2 6	B.	196 4 9	9 13 0	12-5-26	3,925 15 0*
	⅜″ dia.	10	0	0	0	9 2 6	B.	182 13 0	9 2 3	12-5-26	1,828 2 0*
	½″ dia.	5	0	0	0	8 2 6	B.	169 15 11	8 7 11·95	12-5-26	849 15 7*
Rounds, M. S.	½″ dia.	40	0	0	0	6 15 0	C.	150 12 8	7 8 8	1-6-26	86,252 13 4†‡
	⅝″ dia.	32	10	0	0						
	¾″ dia.	85	0	0	0						
	⅞″ dia.	79	10	0	0						
	1″ dia.	110	0	0	0						
	1⅛″ dia.	7	10	0	0						
	1¼″ dia.	75	0	0	0						
	1⅜″ dia.	37	10	0	0						
	1½″ dia.	80	0	0	0						
	2¼″ dia.	25	0	0	0						

* Not oiled or painted for reinforcement work.

† For ordinary work rivets.

‡ For ordinary work.

Half round M. S.	$1\frac{1}{2}'' \times \frac{3}{8}''$	5	0	0	0	9	5	0	B.	184	8	0	9	3	7	20-5-26	922	8 0*
Squares, M. S.	$1\frac{1}{4}'' \times 1\frac{1}{4}''$	5	0	0	0	6	15	0	C	150	12	8	7	8	8	1-6-26	2,865	0 8
	$2'' \times 2''$	4	0	0	0													
	$4'' \times 4''$	10	0	0	0													
Plates and Sheets, M. S.	$8' \times 4' \times \frac{1}{16}''$	30	0	0	0	8	12	6	C	166	1	1	8	4	10	29-5-26	4,982	0 6
	$8' \times 4' \times \frac{1}{8}''$	62	10	0	0	7	7	0	C	148	13	5	7	7	1	29-5-26	10,716	6 9
	$10' \times 4' \times \frac{1}{8}''$	9	10	0	0													
	$8' \times 4' \times \frac{3}{16}''$	22	10	0	0	6	2	0	C	132	0	3	6	9	7	29-5-26	2,970	5 7
	$9' \times 1' \times \frac{3}{16}''$	64	11	0	0	8	4	6	C	160	10	0	8	0	6	3-6-26	10,368	5 6
	$6' \times 3' \times \frac{1}{4}''$	3	0	0	0	6	2	0	C	132	0	3	6	9	7	29-5-26	396	0 9
	$6\frac{1}{2}' \times 3\frac{1}{2}' \times \frac{1}{4}''$	76	3	0	0	8	14	6	C	167	6	5	8	5	11	3-6-26	12,747	9 5†
	$8' \times 4' \times \frac{1}{4}''$	30	0	0	0	6	2	0	C	132	0	3	6	9	7	29-5-26	23,432	12 4
	$10' \times 4' \times \frac{1}{4}''$	25	0	0	0													
	$8'' \times 4' \times \frac{3}{8}''$	60	0	0	0													
	$10' \times 4' \times \frac{3}{8}''$	15	0	0	0													
	$12' \times 4' \times \frac{3}{8}''$	3	15	0	0													
	$10' \times 5' \times \frac{3}{8}''$	7	10	0	0													
	$6' \times 3' \times \frac{1}{2}''$	3	15	0	0													
	$8' \times 4' \times \frac{1}{2}''$	25	0	0	0													
	$8' \times 4' \times \frac{3}{4}''$	7	10	0	0													

* Cold straightened.

† Floor.

April, May and June 1926—concld.

Items.	Sizes.	Quantity imported.	Home price per ton in sterling.	F. O. B. Continental or British ports British—B Continental—C.	Price F. O. R. Bombay including customs duty and all other charges under Rule 8.		Date of Contract.	Total value.
					Per ton.	Per cwt.		
		T. cwt. qr. lbs.	£ s. d.		Rs. A. P.	Rs. A. P.		Rs. A. P.
Plates (strip),	2′-3″ × 1¼″ × 1/16″ .	0 16 3 8	12 5 0	B	203 6 3	10 2 8	12-6-26	171 0 3*
Sheets, M. S., close annealed cold rolled plain.	7′ × 2′ × 7⅛″ × 16 S. W. G.	22 4 1 0	16 15 0	B	265 9 1	13 4 5	4-6-26	15,397 13 0†
	9′ × 2′-7⅛″ × 16 S. W. G.	12 17 0 16						
	10½′ × 2′-7⅛″ × 16 S. W. G.	9 19 3 18						
	12′ × 2′-7⅛″ × 16 S. W. G.	7 12 1 7						
	9′ 0½″ × 2′-7¾″ × 16 S. W. G.	5 6 0 0						

*Straight fence, hard rolled, 35-40 tons tensile.

†For panels.

Sheets, M. S. galvanized corr.	18 B. G. × 2′-8″ out to out 3″ × ¾″	200 15 0 0	15 9 0	C	274 12 4	13 11 10	13 5 26	55,160 3 11
	18 B. G. × 32″ out to out 3″ × ¾″	66 0 0 0	19 9 0	C	328 10 10	16 6 11	3 6 26	21,692 11 0*
Sheets, M. S. galvd. planish.	8½′ × 3′-5″ × 3/32″	12 5 2 14	28 7 6	B	451 8 11	22 9 3	37 5 26	67,761 0 2†
	12′ × 2′-8″ × 3/32″	137 15 2 10						
Wind ties, M. S. galvd.	1½″ × ¼″	6 0 0 0	14 7 6	B	245 3 9	12 4 2	1 6 26	1,471 6 6
Fabricated.								
Rails, steel, F. F. of B. S. 75 R. section.	36′ long with not more than 4 per cent. of 33′ and 2 per cent. of 30′	2,946 10 0 0	6 17 6	B	124 12 8	6 3 10	5 5 26	3,67,698 10 4‡

*Curved for roofs 11 ft. radius 10′=9″ when straight.
†For carriage panels.
‡The holding is to be as detailed in B. S. Specification.

सत्यमेव जयते

B. Statement showing prices at which an order for Steel Sections was placed, half with the Tata Iron and Steel Company Limited in India (for urgent requirements) and half on the Director General, India Store Department, London.

PROTECTED ARTICLES.

Statement showing the comparison of prices for steel sections purchased by the Indian Stores Department and Director General, India Store Department, London.

Description of goods.	No. or quantity.	ORDERED BY I. S. D.		ORDERED THROUGH D. G.	
		Quantity.	Rate per cwt. F.O.R. Tatanagar.	Quantity.	Rate per cwt. F.O.R. Karachi.
	Cwts.	Cwts.	Rs. A. P.	Cwts.	Rs. A. P.
M. S. Angles.					
1½″×1½″×¼″	800	400	7 12 0	400	6 11 2·85
2″×2″×¼″	1,000	500	7 8 0	500	6 11 2·86
2½″×2½″×¼″	200	100	7 4 0	100	6 11 2·85
2″×2″×⅜″	400	200	7 8 0	200	6 11 2·85
M. S. Flats.					
1¼″×¼″	240	120	7 8 0	120	7 3 2·85
1½″×¼″	1,000	500	7 8 0	500	7 3 2·85
1¾″×¼″	160	80	7 8 0	80	7 3 2·85
2″×¼″	500	250	7 8 0	250	7 3 2·85
1½″×⅜″	1,200	600	7 8 0	600	7 3 2·85

2"×3/8"	1,000	500	7	8	0	500	7	3	2·85
2½"×3/8"	700	350	7	4	0	350	7	3	2·85
3"×3/8"	300	150	7	4	0	150	7	3	2·85
2"×½"	1,000	500	7	8	0	500	7	3	2·85
2½"×½"	700	350	7	4	0	350	7	3	2·85
3"×½"	500	250	7	4	0	250	7	3	2·85
1½"×5/8"	240	120	7	8	0	120	7	3	2·85
2"×5/8"	400	200	7	8	0	200	7	3	2·85
1¼"×¾"	360	180	7	8	0	180	7	3	2·85
2"×¾"	200	100	7	8	0	100	7	3	2·85
2½"×¾"	800	400	7	4	0	400	7	3	2·85
3"×¾"	600	300	7	4	0	300	7	3	2·85
2"×1"	400	200	7	8	0	200	7	3	2·85
3"×1"	700	350	7	4	0	350	7	3	2·85
½" dia. 400 cwts. for Boiler Rivets. 2,220 cwts. for ordinary work rivets	2,620	1,820	7	12	0	800	7	3	2·85
5/8" dia. 300 cwts. for Boiler Rivets. 1,920 cwts. for ordinary work rivets	2,220	1,570	7	12	0	650	7	3	2·85
¾" dia. 1,100 cwts. for Boiler Rivets. 600 cwts. for Bridge work rivets. 3,400 cwts. for ordinary work rivets.	5,100	3,400	7	8	0	1,700	7	3	2·85
7/8" dia. 420 cwts. for Boiler Rivets. 3,180 cwts. for ordinary work rivets	3,600	2,010	7	8	0	1,590	7	3	2·85
1" dia. 100 cwts. for Boiler Rivets. 4,400 cwts. for ordinary work rivets	4,500	2,300	7	8	0	2,200	7	3	2·85

Description of goods.	No. or quantity.	ORDERED BY I. S. D.		ORDERED THROUGH D. G.	
		Quantity.	Rate per cwt. F.O.R. Tatanagar.	Quantity.	Rate per cwt. F.O.R. Karachi.
	Cwts.	Cwts.	Rs. A. P.	Cwts.	Rs. A. P.
M. S. Rounds.					
1⅛″ diameter	300	150	7 8 0	150	7 3 2·85
1¼″ ,,	3,000	1,500	7 8 0	1,500	7 3 2·85
1⅜″ ,,	1,500	750	7 8 0	750	7 3 2·85
1½″ ,,	3,200	1,600	7 8 0	1,600	7 3 2·85
2¼″ ,,	1,000	500	7 8 0	500	7 3 2·85
M. S. Square.					
1¼″×1¼″	200	100	7 8 0	100	7 3 2·85
2″×2″	160	80	7 8 0	80	7 3 2·85
3″×3″	400	200	7 8 0	200	7 3 2·85
M. S. Plates.					
6′×3′×¼″	120	60	7 4 0	60	6 4 3·45
8′×4′×¼″	1,200	600	7 4 0	600	6 4 3·45

$10' \times 4' \times \frac{1}{4}''$	1,000	500	7 4 0	500	6 4 3·45
$8' \times 4' \times \frac{3}{8}''$	2,400	1,200	7 4 0	1,200	6 4 3·45
$10' \times 4' \times \frac{3}{8}''$	600	300	7 4 0	300	6 4 3·45
$12' \times 4' \times \frac{3}{8}''$	150	75	7 4 0	75	6 4 3·45
$10' \times 5' \times \frac{3}{8}''$	300	150	7 4 0	150	6 4 3·45
$6' \times 3' \times \frac{1}{2}''$	150	75	7 4 0	75	6 4 3·45
$8' \times 4' \times \frac{1}{2}''$	1,000	500	7 4 0	500	6 4 3·45
$8' \times 4' \times \frac{3}{4}''$	300	150	7 4 0	150	6 4 3·45
M. S. Sheets.					
$8' \times 4' \times \frac{1}{16}''$	1,200	600	9 12 0	600	8 2 7·55
$8' \times 4' \times \frac{1}{8}''$	2,500	1,250	8 4 0	1,250	7 5 0
$10' \times 4' \times \frac{1}{8}''$	380	190	8 4 0	190	7 5 0

NOTE.—Delivery of half the quantities of above noted stores being required urgently order was placed on Messrs. Tata Iron Steel Co., Ltd. Owing to the Industrial situation in England deliveries could not be guaranteed by the D. G. of Stores, London. The D. G.'s quotations were cheaper in all cases than Messrs. Tatas.

सत्यमेव जयते

C.—Statements showing the total quantity and cost of Steel Sections (ordinary) purchased by the Indian Stores Department during 1924-25, 1925-26 and first quarter of 1926-27.

Statement showing the particulars of weight and cost of Steel Sections purchased during the period 1st April 1926 to 30th June 1926.

Order No. and date.	Particulars.	TATA.				BRITISH.				CONTINENTAL.			
		Weight.	Rate per cwt.	F.O.R.	Cost.	Weight.	Rate per cwt.	F.O.R.	Cost.	Weight.	Rate per cwt.	F.O.R.	Cost.
		Cwts.	Rs. A. P.		Rs.	Cwts.	Rs. A. P.		Rs.	Cwts.	Rs. A. P.		Rs.
4278 - H. - 1, dated 5-5-26.	M. S. Flats, 5″×⅜″ and 6″×¾″.	580	7 8 0	Tatanagar	4,350	..	..	..	..	..	..	..	..
	M. S. Rounds, ¼″ diameter.	400	8 0 0	,,	3,200	..	..	..	..	..	..	..	..
	M. S. Rounds, 13/16″ and 15/16″ diameter.	1,700	7 12 0	,,	13,175	..	..	..	..	..	..	..	..
4278 - H. - 2, dated 20-5-26.	R. S. Joists, 5″ × 6″×3″ and 6″×4″.	4,260	7 0 0	,,	29,820	..	..	..	..	..	..	..	..
	M. S. Angles, 1½″×1½″×¼″.	400	7 12 0	,,	3,100	..	..	..	..	..	..	..	..
	M. S. Angles, 2″×2″×¼″ and ⅜″.	700	7 8 0	,,	5,250	..	..	..	..	..	..	..	..
	M. S. Angles, 2½″×2½″×¼″, 3″×3″×¼″, etc.	1,120	7 4 0	,,	8,170	..	..	..	..	..	..	..	..
	M. S. Angles, 3″×3″×⅜″ and ½″, 4″×4″×½″.	2,660	7 0 0	,,	18,620	..	..	..	..	..	..	..	..
	M. S. Channel, 9″×3″×⅜″.	140	7 0 0	,,	980	..	..	..	..	..	..	..	..
	M. S. Flats, 1¼″×1½″ and 1¾″×¼″.	700	7 8 0	,,	5,250	..	..	..	..	..	..	..	..
	M. S. Flats, 2″×¼″, 1½″ and 2″×⅜″.	1,350	7 8 0	,,	10,125	..	..	..	..	..	..	..	..
	M. S. Flats, 2½″×5″×⅜″.	500	7 4 0	,,	3,625	..	..	..	..	..	..	..	..
	M. S. Flats, 2″×½″.	500	7 8 0	,,	3,750	..	..	..	..	..	..	..	..

	M. S. Flats, 2½" and 3"×½".	600	7 4 0	,,	4,350	..	..	..	..	..	..	..	..
	M. S. Flats, 1½" and 2"×⅝".	320	7 8 0	,,	2,400	..	..	..	..	..	..	..	..
	M. S. Flats, 8"×⅝" .	280	7 4 0	,,	2,030	..	..	..	..	..	..	..	..
	M. S. Flats, 1¾" and 2"×¾".	280	7 8 0	,,	2,100	..	..	..	..	..	..	..	..
	M. S. Flats, 2½" and 3"×¾".	700	7 4 0	,,	5,075	..	..	..	..	..	..	..	..
	M. S. Flats, 2"×1" .	200	7 8 0	,,	1,500	..	..	..	..	..	..	..	..
	M. S. Flats, 3"×1" .	350	7 4 0	,,	2,538	..	..	..	..	..	..	..	..
	M. S. Rounds, ⅜", ½" and ⅝" diameter.	1,900	7 12 0	,,	14,725	..	..	..	..	..	..	..	..
	M. S. Rounds, ¾" and ⅞" diameter.	4,050	7 8 0	,,	30,375	..	..	..	..	..	..	..	..
	M. S. Rounds 1" .	2,250	7 8 0	,,	16,875	..	..	..	..	..	..	..	..
	M. S. Rounds, 1⅛", 1¼", 1⅜", 1½" and 2"-3".	6,200	7 8 0	,,	46,500	..	..	..	..	..	..	..	..
	M. S. Squares, 1¼"×1¼", 2" ×2" and 3" ×3".	380	7 8 0	,,	2,850	..	..	..	..	..	..	..	..
	M. S. Plates of sizes	3,610	7 4 0	,,	20,173	..	..	..	..	..	..	..	..
	M. S. Sheets, 8'×4' ×1/16".	600	9 12 0	,,	5,850	..	..	..	..	..	..	..	..
	M. S. Sheets 8'×4'× 1/16" and ⅛", 10'×4' ×⅛".	1,440	8 4 0	,,	11,880	..	..	..	..	..	..	..	..
4278 - H. - 3, dated 25-6-26.	M. S. Round, ⅜", ½" and ⅝".	1,340	7 12 0	,,	10,385	..	..	..	..	..	..	..	..
	M. S. Round, ¾", ⅞", 1", 2", 2½" and 3".	3,110	7 8 0	,,	23,325	..	..	..	..	..	..	..	..
4215 - H. - 1, dated 17-4-26.	M. S. Sheets, 8'×4' ×⅛".	..	..	..	..	..	..	..	..	30	8 2 0	Quetta	K. 244
	M. S. Sheets, 10'×4' ×⅛".	..	..	..	..	..	..	..	..	25	8 6 0	,,	K. 209

NOTE.—K stands for Karachi, the place of despatch.

Order No. and date.	Particulars.	Tata.				British.				Continental.			
		Weight.	Rate per cwt.	F.O.R.	Cost.	Weight.	Rate per cwt.	F.O.R.	Cost.	Weight.	Rate per cwt.	F.O.R.	Cost.
		Cwts.	Rs. A. P.		Rs.	Cwts.	Rs. A. P.		Rs.	Cwts.	Rs. A. P.		Rs.
3763 - H. - 4, dated 12-4-26.	M. S. Round, 1½" diameter.	..	..	..	..	..	..	..	..	1,137 and 2 lbs.	10 0 0	Sukkur	B. 11,939
H-46-4, dated 12-4-26.	R. S. Beams, 12" × 5" and 6".	..	..	..	..	1,850 and 40 lbs.	10 0 0	Shahgai	K. 18,504	..	..	..	..
H-239, dated 11-5-26.	M. S. Hoop, ¾" wide .	..	..	..	..	..	..	..	..	700	8 1 6	Bombay	5,666
H-259, dated 11-5-26.	M. S. Hoop, ¾" wide	..	..	..	..	..	..	..	..	940-20	8 1 6	Bombay	7,610
H-270-2, dated 2-6-26.	M. S. Sheets, 8' × 3' × ⅛".	..	..	..	..	..	..	..	..	700	7 0 0	Sukkur	K. 4,900
H-310, dated 13-5-26.	M. S. Hoop, ¾" wide	..	..	..	..	390	10 7 0	Bombay	4,071	..	..	..	..
H-314-1, dated 20-5-26.	M. S. Tee, 1½" × 1½" × ¼".	..	..	..	..	1,000	8 13 0	Karachi	8,813	..	..	..	..
H-403, dated 10-6-26.	M. S. Hoop, ¾" wide	..	..	..	..	292	10 7 0	Bombay	3,048	..	..	..	..
H-360-2, dated 29-5-26.	Ditto .	..	..	..	..	482-16	10 7 0	Bombay	5,032	..	..	..	..
H-401-2, dated 25-6-26.	R. S. Joists, 7" × 4" .	..	..	..	..	68-64	11 3 5	Ferozepur Cantonment.	K. 769	..	..	..	..
	R. S. Joists, 6" × 3" and 5" × 3".	..	..	..	..	208-16	10 11 6		K. 2231	..	..	..	..
	R. S. Joists, 4¾" × 1¾"	..	..	..	..	11-16	11 3 5		K. 125	..	..	..	..
H-372-1, dated 11-6-26.	M. S. Tee, 1½" × 1½" × ¼".	..	..	..	..	..	..	..	..	1,000	7 12 0	Karachi	7,750
	TOTAL .	42,620	..	..	3,12,346	4,302 and 40 lbs.	..	..	42,593	4,532 and 22 lbs.	..	..	38,318

NOTE.—K and B stand for Karachi and Bombay, respectively, the places of despatch.

Summary showing the total quantity and cost of Steel Sections purchased during the years 1924-25 and 1925-26.

	Weights.		Cost.
	Cwts.	lbs.	Rs.
1924-25.			
British	8,803	33	96,565
Continental	28,374	55	2,37,609
Tata	23,104	51	2,19,993
TOTAL	60,282	27	5,54,167
1925-26.			
British	13,438	102	1,29,326
Continental	31,883	35	2,87,836
Tata	6,924	11	67,743
TOTAL	52,246	36	4,84,905
GRAND TOTAL	112,528 (5,626 tons approx.)	63	10,39,072

सत्यमेव जयते

1924-25.

Order No. and Date.	Particulars.	TATA.			BRITISH.			CONTINENTAL.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.
N-521, dated 7-5-24	R. S. Beams 15″×5″	..	..	..	..	..	..	49 77	9 0 0 Karachi.	447
N-525, dated 8-5-24	M. S. Rods ½″ dia.	..	..	..	572½	7 12 0 Karachi.	4,437	..	..	..
N-534-2, dated 29-5-24	R. S. Beams 7″×4″ and 6″×3″	..	..	..	..	..	..	118 74	6 6 0 Karachi.	756
N-534-3, dated 30-5-24	R. S. Beams 9″×4″	..	..	..	..	..	..	414 73	7 8 0 Karachi.	3,110
N-534-4, dated 27-6-24	R. S. Beams 5″×3″	..	..	..	15 102	10 7 6 Karachi.	167	..	..	..
N-557-1, dated 29-5-24	R. S. Beams 7″×4″ and 6″×3″	..	..	..	..	..	..	295 36	6 6 0 Karachi.	1,883
N-557-2, dated 30-5-24	R. S. Beams 8″×4″ and 7″×4″	..	..	..	..	..	..	708 10	7 6 0 Karachi.	5,222
N-557-3, dated 5-6-24	R. S. Beams 6″×3″ and 5″×3″	..	..	..	..	..	..	378 56	7 3 0 Karachi.	2,721
N-563-1, dated 29-5-24	R. S. Beams 10″×5″	..	..	..	..	..	..	135 0	6 8 0 Karachi.	878
N-563-2, dated 30-5-24	R. S. Beams 9″×4″	...	..	..	..	..	..	36 63	7 8 0 Karachi.	274
N-591-1, dated 16-6-24	M. S. Sheets 7′×3′×1/16″	..	..	..	..	..	..	11½ 0	10 12 0 Poona.	124 B
N-636, dated 30-5-24	M. S. Round ⅜″	..	..	..	..	..	..	10 Tons	7 6 0	1,475
N-660, dated 23-6-24	R. S. Beams 12″×6″	..	..	..	..	..	..	Cwt. lbs. 23 64	7 8 0 Karachi.	177
N-686, dated 1-7-24	R. S. Joists 7″×4″, 6″×3″, 5″×3″, 4¾″×1¾″	..	..	..	253 96	10 7 6 Karachi.	2,658	..	..	..

N-689-2, dated 30-6-24	M. S. Sheets 6′×3′, 8′×3′ and 6′×2′.	..	..	..	..	..	..	29 0	11 0 0 Karachi.	31^{9}
N-706-1, dated 1-7-24	M. S. Rounds ½″	..	..	..	..	..	..	5 Tons	7 11 6 Karachi.	772
	M. S. Rounds ⅜″	..	..	..	..	..	..	3 ,,	7 10 0 Karachi.	458
	M. S. Rounds ¼″	..	..	..	..	..	..	5 ,,	8 12 0 Karachi.	875
N-706-3, dated 10-7-24	M. S. Flat 2″×⅛″	..	..	..	..	..	..	2 ,,	7 12 0 Bombay.	310 B
N-601-1, dated 17-6-24	M. S. Angle 1¼″×¼″	..	..	..	10 Cwt.	11 4 0 Bangalore Cantt.	B 113	..	..	..
N-608, dated 10-6-24	M. S. Flat bars ¾″×¼″	..	..	..	20 ,,	8 14 0 Secunderabad.	B 178	..	..	..
	M. S. Round bars $\frac{1}{16}$″ dia.	..	..	..	15 ,,	8 4 0 Secunderabad.	B 124	..	..	..
	M. S. Hoops ¼″×$\frac{1}{16}$″, 1″×$\frac{1}{16}$″ 2½″×$\frac{1}{16}$″ and 3″×$\frac{1}{16}$″.	..	..	..	60 ,,	11 0 0 Secunderabad.	660B	..	..	..
N-740-1, dated 12-7-24	R. S. Joists of sizes	..	..	..	Cwts. lbs. 227 67	10 14 0 Karachi.	2,475	..	..	..
	R. S. Joists 7″×4″	..	..	..	159 0	10 10 6 Karachi.	1,694	..	..	..
N-740-3, dated 12-7-24	R. S. Joists 8″×5″	..	..	..	..	..	..	Cwts. lbs. 16 0	12 0 0 Kohat.	192 B
N-745-1, dated 31-7-24	M. S. Sheets 8′×3″×⅛″	..	..	..	..	..	..	17 56	9 4 0 Karachi.	162 K
N-745-3, dated 30-7-24	M. S. Sheets 8′×3′×$\frac{1}{16}$″	..	..	..	..	..	..	34 0	10 10 0 Karachi.	361 K
N-754, dated 24-7-24	M. S. Rods ½″ dia.	25 Tons	11 0 0 Multan City.	5,500 J	..	..	..	..	..	..
N-780, dated 4-8-24	M. S. Angle 4″×3″×⅜″	..	..	..	13 0	11 10 0 Gul-Imam (Tank).	151 K	..	..	..

Order No. and Date.	Particulars.	TATA.			BRITISH.			CONTINENTAL.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.
N-837, dated 13-8-24 .	R. S. Beams 8" × 4" and 9" × 4"	..	..	..	..	..	..	32 70	9 10 0 Khewra.	314 K
N-838-1, dated 8-8-24 .	M. S. Tee 1½" × 1½" × ¼" . .	..	..	..	..	..	..	65 52	11 6 0 Lahore Cantt.	745 K
N-838-2, dated 9-8-24 .	R. S. Joists 4¾" × 1¾" . .	..	..	..	33 22	10 0 0 Lahore.	332 K	..	..	..
N-838-3, dated 8-8-24 .	R. S. Joists 3" × 1½" . .	..	..	..	..	..	..	45 0	10 10 0 Lahore Cantt.	478 B
N-858, dated 27-8-24 .	M. S. Angle 1¼" × 1¼" × ¼" .	..	..	..	..	..	..	20 0	8 2 5 Poona.	163 B
N-883, dated 18-8-24 .	R. S. Joists 7" × 4" . . .	..	..	..	..	..	..	33½	10 0 0 Kohat.	335 K
N-892-2, dated 20-8-24 .	R. S. Beams 3" × 1½" . .	..	..	..	..	..	..	62 46	9 14 0 Kampti.	616 B
N-892-3, dated 20-8-24 .	M. S. Sheets 3' × 3/16" .	..	..	..	..	..	..	16 44	12 0 0 Jubbulpur.	197 B
N-906, dated 15-8-24 .	M. S. Round ¼", ⅞", 7½" . .	..	..	..	..	..	..	Tons Cwt. 12 19	10 2 0 Rawalpindi.	2,622 K
N-948, dated 23-8-24 .	R. S. Beams 10" × 5" . .	..	..	..	15 30	10 6 0 Karachi.	158 K	..	..	..
N-960, dated 29-8-24 .	R. S. Beams 10" × 5" . . .	..	..	..	..	..	..	43 44	8 0 0 Karachi.	347
N-974-1, dated 23-9-24 .	R. S. Beams of sizes . . .	244 0	11 0 0 Dunyapur	2,684 J	..	..	..	..	..	..
N-974-2, dated 23-9-24 .	R. S. Beams 8" × 4", 7" × 4" 6" × 3" and 5" × 3".	317 40	11 0 0 Lodhran.	3,492 J	..	..	..	..	..	..

N-974-3, dated 23-9-24 .	R. S. Beams 8″×4″, 7″×4″ 6″×3″ and 5″×3″.	153 66	11 0 0 Shalmal.	1,690 J	..	..	..	..	..	..
N-974-4, dated 23-9-24 .	R. S. Beams 8″×4″, 7″×4″, 6″×3″ and 5″×3″.	238 0	11 0 0 Gilawala.	2,618 J	..	..	..	..	..	..
N-974-5, dated 23-9-24 .	R. S. Beams 4″×3″; 7″×4″, 6″×3″ and 5″×3″.	..	..	..	32 98	9 8 0 Howrah.	312 C	..	..	..
N-974-6, dated 23-9-24 .	R. S. Beams 4″×3″, 7″×4″, 6″×3″ and 5″×3″.	..	..	..	48 39	9 8 0 Howrah.	459 C	..	..	..
N-974-7, dated 23-9-24 .	R. S. Beams 4″×3″, ″7×4″, 6″×3″ and 5″×3″.	..	..	..	33 85	9 8 0 Howrah.	321 C	..	..	..
N-974-8, dated 23-9:24 .	R. S. Beams 4″×3″, 7″×4″, 6″×3″ and 5″×3″.	..	..	..	36 25	9 8 0 Howrah.	344 C	..	..	..
N-980, dated 1-9-24 .	R. S. Beams 8″×4″, 7″×4″, 6″×3″ and 5″×3″.	..	..	..	..	..	..	14 52	7 4 0 Karachi.	105 K
N-980-2, dated 22-9-24 .	R. S. Beams 8″×4″ .	..	..	..	..	..	..	14 52	7 7 0 Karachi.	108 K
N-1007-1, dated 24-9-24 .	R. S. Beams 8″×4″ . .	..	..	..	..	..	..	79 80	10 6 0 Girni Road.	827 K
	R. S. Beams 8″×4″ . .	..	..	..	..	..	..	25 80	10 0 0 Girni Road.	257 K
N-1007-2, dated 26-9-24 .	R. S. Beams 10″×6″ . .	..	..	..	16½	11 0 0 Girni Road.	182 C	..	..	..
N-1039-1, dated 25-9-24 .	M. S. Round ¼″ . . .	..	..	..	..	..	..	122 0	9 0 0 Secunderabad.	1,098 B
N-1039-2, dated 25-9-24 .	R. S. Beams 8″×4″ . .	..	..	..	..	..	..	105 66	7 10 0 Bombay.	805 B
N-1042-2, dated 14-10-24.	M. S. Round bars ⅞″ . .	..	..	..	..	..	..	56½ Cwt.	9 14 0 Risalpur.	558 K
	M. S. Round bars ¾″ . .	..	..	..	..	..	..	164¼ ,,	9 15 0 Risalpur.	1,635 K
	M. S. Round bars ⅝″ . .	..	..	..	..	..	..	74½ ,,	10 0 0 Risalpur.	745 K
	M. S. Round bars ⅝″ . .	..	..	..	..	..	..	5 ,,	14 0 0 Risalpur.	70 K
	M. S. Round bars ½″ . .	..	..	..	..	..	..	17½ ,,	10 0 0 Risalpur.	175 K

Order No. and Date.	Particulars.	Tata.			British.			Continental.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.
N-1042-3, dated 14-10-24.	M. S. Round bars ⅜"	..	..	..	..	..	..	1¼ cwt.	12 2 0 Risalpur.	15 K
	R. S. Round bars ¾"	..	..	..	..	..	..	30¾ ,,	10 9 0 Risalpur.	325 K
N-1066, dated 25-9-24	R. S. Beams 9" × 4"	..	..	..	..	..	..	43 98	9 10 0 Mardan.	422 K
N-1092, dated 30-9-24	M. S. Channels 3" × 1½"	..	..	..	16 50	14 0 0 Dalowali.	230 K	..	..	..
N-1107, dated 25-9-24	R. S. Beams 16" × 6"	..	..	..	225 34	12 0 0 Karachi.	2,704 K	..	..	..
N-1107-2, dated 29-9-24	R. S. Beams 16" × 6"	..	..	..	22 16	12 0 0 Karachi.	266 K	..	..	..
N-1137-1, dated 20-10-24.	R. S. Joists 3" × 1½"	..	..	..	..	..	..	327 68	11 2 0 Dera Ismail Khan.	3,496 K
	R. S. Joists 4¾" × 1¾"	..	..	..	..	..	..	66 99	10 14 0 Dera Ismail Khan.	727 K
	R. S. Joists 8" × 4"	..	..	..	..	..	..	12 51	11 12 0 Dera Ismail Khan.	146 K
	R. S. Joists 9" × 4"	..	..	..	..	..	..	51 28	10 2 0 Dera Ismail Khan.	519 K
N-1137-2, dated 20-10-24.	R. S. Joists 4" × 3"	..	..	..	..	..	..	40 9	11 1 0 Dera Ismail Khan.	443 K
	R. S. Joists 5" × 3"	..	..	..	..	..	..	18 13	9 13 6 Dera Ismail Khan.	178 K
	R. S. Joists 5" × 3"	..	..	..	..	..	..	54 41	9 13 6 Dera Ismail Khan.	535 K

N-1200-1, dated 3-10-24	R. S. Beams 12″×5″	..	..	..	..	..	..	138 0	9 15 0 Jamrud.	1,371 K
N-1200-2, dated 3-12-24	R. S. Beams 4″×1¾″	..	..	..	..	..	..	28 89	10 12 0 Jamrud.	310 B
N-1203, dated 10-11-24	M. S. Angles 2″×2″×¼″	..	..	..	..	..	..	20 0	9 11 3 Bannu.	194 K
N-1206, dated 6-10-24	R. S. Beams 6″×3″	..	..	..	..	..	..	13 0	10 11 0 Peshawar Cantt.	139 K
N-1241, dated 10-10-24	R. S. Joists 8″×3″	..	..	..	9 108	10 8 0 Karachi.	105 K	..	..	..
N-1277, dated 11-11-24	M. S. Round ½″	..	..	..	..	..	..	10 0	12 0 0 Murree.	120 K
N-1349-1, dated 21-11-24	R. S. Beams 4¾″×1¾″	..	..	..	38 79	9 8 0 Lahore Cantt.	368 K	..	..	..
N-1350-1, dated 27-11-24	R. S. Beams 12″×5″ and 10″×5″	..	..	..	22 24	10 11 0 Hyderabad.	237 K	..	..	..
N-1351, dated 27-11-24	R. S. Joists 4¾″×1¾″	..	..	..	21 53	9 4 0 Daryakhan.	199 K	..	..	..
N-1393-3, dated 3-12-24	R. S. Beams of sizes	..	..	..	211 19	12 15 0 Bannu.	2,732 K	..	..	..
N-1394, dated 9-12-24	M. S. Plates 6′ 6″×3′ 1½″×¼″	..	..	..	..	..	..	14 90	13 13 0 Bannu.	204 K
1396-3, dated 22-11-24	Angle iron 1½″×1½″×¼″	..	..	..	..	..	..	10 0	10 5 6 Kohat.	103 K
1399-1, dated 3-12-24	M. S. Plates ¼″×2′2″ ×4′	..	..	..	..	..	..	17 8	16 0 0 Bombay.	273 B
1401-3, dated 2-12-24	M. S. Rounds ½″	..	..	..	..	..	..	53 83	9 12 6	526 K
	M. S. Flat 1¼″×¼″	..	..	..	..	..	..	38 20	9 12 6 Rawalpindi.	374 K
1432, dated 22-11-24	R. S. Beams 7″×4″	..	..	..	..	..	..	18 0	10 2 0 Mardan.	182 K
1454 dated 1-12-24	R. S. Beams 7″×4″	..	..	..	..	..	..	10 32	9 15 0 Mardan.	102 K
	R. S. Beams 10″×5″	..	..	..	..	..	..	57 96	9 3 0 Mardan.	532 K

Order No. and Date.	Particulars.	TATA.			BRITISH.			CONTINENTAL.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.
1455, dated 1-12-24 .	R. S. Beams 10″×5″ . .	..	..	..	..	..	..	77 16	9 3 0 Nowshera.	707 K
	R. S. Beams 7″×4″ . .	..	..	..	..	..	..	13 80	9 15 0 Nowshera.	136 K
	R. S. Beams 5″×3″ . .	..	..	..	..	..	..	21 68	9 1 0 Nowshera.	195 K
1365-1, dated 28-11-24	M. S. Plates 6′×3′×$\frac{1}{8}$″ . .	..	..	..	..	..	..	$40\frac{1}{4}$ cwt.	10 11 0 Lahore Cantt.	430 K
1365-3, dated 28-11-24 .	M. S. Plates 7′×3′×$\frac{1}{16}$″ . .	..	..	..	..	..	..	$23\frac{1}{2}$,,	11 15 0 Lahore Cantt.	280 K
1433-2, dated 28-11-24 .	R. S. Joists 3″×5″ . . .	..	..	..	..	..	..	33 66	9 6 0 Jamrud.	315 K
	R. S. Joists 3″×5″ . . .	..	..	..	..	..	..	13 98	9 8 0 Jamrud.	132 K
	R. S. Joists 3″×5″ . . .	..	..	..	..	..	..	11 53	9 2 0 Jamrud.	105 K
1505. dated 25-11-24 .	M. S. Plates, 2′×3′×$\frac{1}{2}$″. and 4′ 4″×3′×$\frac{1}{2}$″.	..	..	..	..	..	..	13 67	11 0 0 Karachi.	150 K
1517-1, dated 12-12-24 .	R. S. Beams 7″×4″ . .	..	..	..	..	..	..	$12\frac{1}{7}$ 0	9 0 0 Quetta.	109 K
1522-1, dated 9-12-24 .	R. S. Beams 9″×4″ . .	..	..	..	..	..	..	15 84	9 11 6 Risalpur.	153 K
	R. S. Beams 7″×4″ . .	..	..	..	..	..	..	168 0	10 2 6 Risalpur.	1,706 K
1522-3, dated 10-1-25 .	R S. Beams 10″×5″ .	..	..	..	369 72	10 8 0 Karachi.	3,881	..	..	..
	R. S. Beams 10″×5″ . .	..	..	..	..	..	..	112 56	8 0 0 Karachi.	900 K

1525-3, dated 11-12-24	M S. Round 1"	..	..	..	..	..	..	2 Tons	9 15 0 Rawalpindi.	398 K
1536-1, dated 27-1-25	R. S. Beams and joists of sizes	..	..	..	..	..	..	188 94	7 3 0 Karachi.	1,357 K
		..	..	..	..	..	..	188 94	7 3 0 Karachi.	1,357 K
		..	..	..	..	..	..	188 94	7 3 0 Karachi.	1,357 K
	R. S. Beams of sizes	..	..	..	..	..	..	256 106	7 3 0 Karachi.	1,847 K
		..	..	..	..	..	..	415 56	7 3 0 Karachi.	2,960 K
		..	..	..	..	..	..	97 99	7 3 0 Karachi.	703 K
		..	..	..	..	..	..	292 92	7 3 0 Karachi.	2,105 K
1536-2, dated 27-1-25	R. S. Beams of sizes	..	..	..	..	..	..	877 55	7 3 0 Karachi.	6,307 K
1536-3, dated 17-2-25	R. S. Beams of sizes	..	..	..	..	..	..	794 96	7 3 0	5,721 K
1536-4, dated 17-2-25	R. S. Beams of sizes	..	..	..	..	..	..	112 0	7 3 0	805 K
1536-5, dated 17-2-25	R. S. Beams of sizes	..	..	..	..	..	..	232 73	7 3 0	1,668 K
1536-6, dated 5-3-25	R. S. Beams of sizes	..	..	..	..	..	..	70 56	7 3 0	507 K
1536-7, dated 5-3-25	R. S. Beams of sizes	..	..	..	..	..	..	292 92	7 3 0	2,105 K
1536-8, dated 16-3-25	R S. Beams of sizes	..	..	..	..	..	..	79 32	7 3 0	570 K
1537, dated 3-12-24	Angle iron 1½"×1½"×¼"	..	..	..	..	..	..	20 Tons	7 6 0	2,950 K
	Angle iron 1½"×1½"×¼"	..	..	..	..	..	..	10 ,,	7 3 6	1,444 K
	Angle iron 1"×1"×⅛"	..	..	..	..	..	..	4 ,,	8 2 0	650 K
1567, dated 28-11-24	R. S. Beams of sizes	..	..	..	..	..	..	Cwt. lbs. 39 92	7 11 0 Larkana.	306 K
	R. S. Joists of sizes	..	..	..	..	..	..	498 73	7 14 0 Larkana.	3,926 K

Order No. and Date.	Particulars.	TATAS.			BRITISH.			CONTINENTAL.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.
1581-1, dated 18-12-24	R. S. Joists of sizes	..	..	..	..	..	..	16 3 12	9 14 0 Kohat.	167 K
	R. S. Joists 5″×3″	..	..	..	..	..	..	23 3 0	8 14 0 Kohat.	211 K
1581-2, dated 18-12-24	M. S. Tee 1½″×1½″×¼″	..	..	..	..	..	..	56 0	10 3 0 Kohat.	571 K
1624-3, dated 30-12-24	M. S. Angle 1½″×1½″×$\frac{3}{16}$″	..	..	..	..	..	..	14 0	10 8 0 Lahore Cantt.	147 K
1635, dated 17-12-24	R. S. Joists 7″×4″	..	..	..	..	..	..	14 96	9 12 6 Kohat.	145 K
	R. S. Joists 6″×3	..	..	..	..	..	..	21 24	9 4 6 Kohat.	197 K
1636-2, dated 30-12-24	M. S. Sheets 8′×4′×$\frac{1}{16}$″	..	..	..	..	..	..	10 0	11 6 0 Quetta.	114 K
	M. S. Sheets 8′×4′×⅛″and 6′×3′×⅛″.	..	..	..	..	..	..	15 0	10 0 0 Quetta.	250 K
1648, dated 27-12-24	R. S. Beams 6″×3″	..	..	..	..	..	..	14 16	9 9 6 Risalpore.	136 K
1649, dated 13-12-24	M. S. Rounds ⅜″	..	..	..	..	..	..	175 0	9 7 0 Sialkot.	1,652 K
	M. S. Rounds ¼″	..	..	..	..	..	..	58 0	10 5 0 Sialkot.	598 K
1657, dated 15-12-24	R. S. Beams 9″×4″	..	..	..	..	..	..	31 2 0	6 14 0	217 K
1684, dated 27-12-24	M .S. Rounds ⅝″	..	..	..	..	..	..	31 0 0	7 2 0	221 K
1688-4, dated 10-1-25	R. S. Beams 10″×5″	..	..	..	..	..	..	19 1 4	7 3 0 Daur and Padidan N. W. R.	139 K

1695-2, dated 7-1-25	R. S. Beams 3"×1½" and 4"×1¾"	..	..	..	..	..	..	685 80	9 15 0 Amballa Cantt.	6,814 K
	R. S. Beams 5"×3"	..	..	..	..	..	..	21 24	8 13 0 Amballa Cantt.	187 K
	M. S. Rounds ⅜"	..	..	..	..	..	..	13 0	9 12 0 Amballa Cantt.	127 K
	R. S. Beams 5"×3"	..	..	..	..	..	..	435 54	8 13 0 Amballa Cantt.	3,838 K
	M. S. Tee 1½"×1½"×¼"	..	..	..	..	..	..	10 8 4	10 3 0 Amballa Cantt.	1,101 K
1695-3, dated 7-1-25	M. S. Tee 1½"×1½"×¼"	..	..	..	..	..	..	894 22	7 14 0 Howrah.	7,042 C
1695-4, dated 7-1-25	M. S. Angles 1¼"×1¼"×¼"	93 79	9 0 0 Amballa Cantt.	843 J	..	..	..	..	..	..
	M. S. Angles 1½"×1½"×¼"	96 40	9 0 0 Amballa Cantt.	867 J	..	..	..	..	..	..
1695-5, dated 7-1-25	R. S. Beams 3"×1½"	..	..	..	..	..	..	336 96	9 15 0 Amballa Cantt.	3,348 B
1695-6, dated 12-1-25	R. S. Beams 9"×4"	..	..	..	..	..	..	1,458 84	9 7 0 Amballa Cantt.	13,767 B
1695-7, dated 23-1-25	M. S. Tees 2"×2"×$\frac{3}{16}$"	..	..	..	..	..	..	894 51	10 10 0 Amballa Cantt.	9,504 K
1695-9, dated 17-3-25	M. S. Tees 2"×2"×$\frac{7}{32}$" to ¼"	..	..	..	..	..	..	557 94	6 14 0 Karachi.	3,835 K
1695-8, dated 6-3-25	M. S. Tees 1½"×1½"×¼"	..	..	..	..	..	..	200 0	7 12 0 Bombay.	1,550 B
1709, dated 23-12-24	R. S. Joists 4"×1¾" and 3"×1½"	..	..	..	..	..	..	155 85	7 2 0 Karachi.	1,110 K

Order No. and Date.	Particulars.	Tatas.			British.			Continental.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.
1729, dated 2-1-25	M. S. Plates 8′ × 4′ × ½″	93 28	188 8 0 a ton Amritsar.	879 J	..	..	..	..	..	..
	M. S. Channels 8″ × 3½″	20 32	179 12 0 a ton Amritsar.	182 J	..	..	..	..	..	..
1758-1, dated 22-1-25	R. S. Beams 6″ × 3″	110 100	9 8 0 Ambala Cantt.	1,053 J	..	..	..	..	..	..
1758-2, dated 22-1-25	M. S. Tees 1½″ × 1½″ × ¼″	..	..	..	..	..	..	16 86	10 4 9 Ambala Cantt.	173 C
	M. S. Tees 1½″ × 1½″ × ¼″	..	..	..	..	..	..	10 21	10 5 9 Ambala Cantt.	106 C
1758-3, dated 27-1-25	M. S. Tees 1½″ × 1½″ × ¼″	..	..	..	..	..	..	158 43	11 2 0 Ambala Cantt.	1,762 K
1763-5, dated 28-1-25	R. S. Beams 3″ × 1½″	..	..	..	..	..	..	319 28	9 6 9 Sialkot.	3,008 K
1763-4, dated 28-1-25	M. S. Tees 1½″ × 1½″ × ¼″	..	..	..	..	..	..	167 96	10 6 0 Sialkot.	1,742 B
1763-2, dated 28-1-25	R. S. Beams 9″ × 4″	1,123 75	11 4 0 Sialkot.	12,641 J	..	..	..	..	..	..
1763-1, dated 28-1-25	R. S. Joists 4″ × 1¾″	..	..	..	..	..	..	342 96	9 12 3 Sialkot.	3,348 K
	M. S. Tees 1½″ × 1½″ × ¼″	..	..	..	..	..	..	190 105	10 4 3 Sialkot.	1,960 K
1763-3, dated 28-1-25	M. S. Angle 1½″ × 1½″ × ¼″	..	..	..	..	..	..	62 64	9 13 0 Sialkot.	614 K
1763-4, dated 24-2-25	R. S. Beams 5″ × 3″	..	..	..	..	..	..	197 0	6 8 0 Karachi.	1,927 K

1769, dated 19-1-25	R. S. Beams 8"×4"	..	..	..	..	..	..	22 56	9 4 0 Khewra.	208 K
2019-5, dated 1-3-25	M. S. Hoop 2"	..	..	..	..	..	..	10 0	10 8 0 Khewra.	105 K
1781, dated 5-2-25	R. S. Beams 5"×3"	..	..	..	..	..	..	54 2	6 4 0 Karachi.	339 K
	R. S. Beams of sizes	..	..	..	..	..	..	67 60	7 4 0 Karachi.	490 K
1784-2, dated 3-2-25	M. S. Sheets 6'×3'	..	..	..	10 0	16 0 9 Rawalpindi.	160 C	..	..	..
1784-4, dated 3-2-25	M. S. Sheets 6'×3'×1/16"	..	..	..	..	..	..	8 0	12 12 0 Rawalpindi.	102 K
	M. S. Angle 2"×2"×¼" and 3"×3".	..	..	..	..	..	..	15 0	10 0 0 Rawalpindi.	150 K
1784-6, dated 3-2-25	M. S. Flat 2"×¼"	..	..	..	..	..	..	20 0	10 2 0 Rawalpindi.	203 B
1788-1, dated 3-2-25	M. S. Flat 1"×⅛"	..	..	..	..	..	..	40 0	10 8 3 Lahore.	421 K
	M. S. Flat 2"×¼"	..	..	..	..	..	..	200 0	9 15 3 Lahore.	1,991 K
1788-2, dated 3-2-25	M. S. Angles 1"×1"×⅛"	..	..	..	..	..	..	260 0	9 10 0 Lahore.	2,503 K
	M. S. Flat 1½"×⅜"	..	..	..	..	..	..	40 0	10 2 0 Lahore.	405 K
1788-3, dated 3-2-25	M. S. Rounds ½"	..	..	..	..	..	..	200 0	9 0 0 Lahore.	1,800 B
1788-4, dated 3-2-25	M. S. Angles 1¼"×1¼"×¼"	60 0	9 12 0 Lahore.	585 J	..	..	..	..	..	..
	M. S. Rounds ⅝"	200 0	9 12 0 Lahore.	1,950 J	..	..	..	..	..	..
	M. S. Rounds ¾"	100 0	9 12 0 Lahore.	975 J	..	..	..	..	..	..
1788-5, dated 3-2-25	M. S. Angles 1"×1"×⅛"	..	..	..	..	..	..	60 0	10 0 3 Lahore.	601 K
	M. S. Angles 2"×2"×¼"	..	..	..	..	..	..	100 0	9 4 3 Lahore.	927 K

Order No. and Date.	Particulars.	Tata.			British.			Continental.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.
	M. S. Flat 2"×⅛"	..	..	..	..	..	..	40 0	9 14 3 Lahore.	396 K
	M. S. Rounds ⅜"	..	..	..	..	..	..	200 0	9 4 3 Lahore.	1,853 K
	M. S. Rounds ¼"	..	..	..	..	..	..	100 0	9 14 3 Lahore.	989 K
	M. S. Square ¼"	..	..	..	..	..	..	20 0	9 14 3 Lahore.	198 K
1802, dated 29-1-25	M. S. Plates 3'×6'×⅜" and 7'×3'×⅜'.	..	..	..	..	..	..	43 49	9 0 0	391 K
	M. S. Angles 3×3×¼ and 2×2×¼	..	..	..	..	..	..	14 79	7 2 0	105 K
1814, dated 30-1-25	R. S. Beams 9×4, 8×4, 7×4, 6'×3.	..	..	..	55 32	11 14 3 Lodhran.	657 K	..	..	..
1820-1, dated 2-2-25	R. S. Beams of sizes	..	..	..	..	..	..	334 90	10 9 6 Thall.	3,546 K
1822, dated 27-1-25	R. S. Beams 14'×6"	..	..	..	..	..	..	35 32	8 8 0	304 K
1829, dated 6-2-25	R. S. Joists of sizes.	..	..	..	..	..	..	24 38	7 12 0	824 K
	R. S. Joists of sizes	..	..	..	..	..	..	111 48	7 2 0	794 K
1838, dated 3-2-25	R. S. Joists of sizes	..	..	..	..	..	..	81 37	7 12 0	630 K
1841-1, dated 28-2-25	M. S. Sheets ¼'×6'×3'	..	..	..	..	..	..	16 56	8 3 0	135 K
	M. S. Rounds ½" dia.	..	..	..	..	..	..	37 0	7 6 0	273 K
1841-2, dated 28-2-25	R. S. Beams 6"×3"	..	..	..	..	..	..	25 80	6 12 0	174 K
1843, dated 30-1-25	R. S. Beams 10"×5"	..	..	..	..	..	..	7 71	7 12 0	59 K
	R. S. Beams 6"×3"	..	..	..	..	..	..	79 62	6 15 0	552 K

1843-4, dated 25-2-25	M. S. Flats 2½″×½″	..	..	..	..	..	..	14 77	8 0 0	118 K
1845, dated 5-2-25	R. S. Beams 15″×5″	..	..	..	..	..	..	57 42	8 4 0	473 K
	R. S. Beams 8″×4″	..	..	..	..	..	..	16 35	7 0 0	114 K
1853, dated 17-1-25	R. S. Beams 6″×3″	25 8	9 8 0 Delhi.	238 D	..	..	..	..	..	..
1856, dated 27-1-25	Angle iron 2″×2″×¼″	..	..	..	..	..	..	15 0	7 4 0	139 K
1896, dated 6-2-25	R. S. Beams 5″×3″	..	..	..	..	..	..	38 56	6 4 0	241 K
1867, dated 6-2-25	R. S. Round bars different dia.	20 tons	200 a ton Chananerula.	4,000 J	..	..	..	..	..	..
1898-1, dated 11-2-25	M. S. Plates 8″×4″×½″	582 96 lb.	165 a ton Ishapur.	4,809 J	..	..	..	..	..	..
1898-2, dated 11-2-25	R. S. Beams 8″×6″	..	..	..	315 0	9 14 0 Ishapur.	3,111 C	..	..	..
1909, dated 9-2-25	M. S. Angles and Rounds of sizes	..	..	..	..	..	..	23 0	9 0 0 Madras.	207 M
1915, dated 10-3-25	M. S. Angle of sizes	..	..	..	..	..	..	34 11	9 8 0 Madras.	324 M
	M. S. Rounds ¾″	..	..	..	..	..	..	32 0	8 8 0 Madras.	272 M
1927, dated 11-2-25	M. S. Flat 2×¼	..	..	..	1,612 r.ft.	9 10 6 Rawalpindi.	236 K	..	..	..
	M. S. Angle 2½″×2½″×¼″	..	..	..	..	..	..	744 r.ft.	10 2 6 Rawalpindi.	272 K
1928, dated 6-2-25	M. S. Square ½″	..	..	..	..	..	..	17 4	7 10 0	130 K
1969, dated 9-3-25	R. S. Joists 9×4	..	..	..	..	..	..	47 60	7 2 0 Karachi.	339 K
	R. S. Joists 6×3	..	..	..	..	..	..	14 52	7 2 0 Karachi.	103 K
	R. S. Joists 5×3	..	..	..	..	..	..	44 61	6 8 0 Karachi.	290 K
	R. S. Joists 4¾×1¾	..	..	..	..	..	..	28 7	7 0 0 Karachi.	196 K

Order No. and Date.	Particulars.	TATAS.			BRITISH.			CONTINENTAL.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.
	R. S. Joists 4×1¾	..	..	..	..	..	..	57 25	7 5 0	419 K
	R. S. Joists 3×1½	..	..	..	28 79	10 8 0 Karachi.	301 K	..	..	..
1968-1, dated 10-3-25	R. S. Beams 9×4	..	..	..	201 11	10 0 0 Karachi.	2,011 K	318 11	7 2 0	2,266 K
	R. S. Beams 8″×4″, 6″×3″	..	..	..	98 7	10 0 0 Karachi.	981 K	..	..	..
	R. S. Beams 5×3	..	..	..	..	..	..	499 86	6 8 0	3,249 K
	R. S. Beams 4¾×1¾	..	..	..	..	..	..	22 26	7 0 0	156 K
	R. S. Beams 4×1¾	..	..	..	305 94	10 8 0 Karachi.	3,211 K	..	..	..
					62 95	10 8 0	660 K	..	..	..
	R. S. Beams 3×1½	..	..	..	240 27	10 12 0	2,583 K	..	..	..
					219 7	10 8 0	2,300 K			
1968-2, dated 9-3-25	R. S. Beams 9×4	..	..	..	..	..	..	310 88	7 4 0	2,253 K
1968-3, dated 1-4-25	R. S. Beams 9×4	..	..	..	91 46	10 0 0 Karachi.	914 K	47 60	7 4 0 Karachi.	345 K
2033, dated 2-3-25	R. S. Joists 7×4	..	..	..	..	..	..	27 48	6 12 0 Karachi.	186 K
2053, dated 28-2-25	R. S. Joists 9×4 and 7×4	..	..	..	..	..	..	93 46	10 0 3 Manzai.	936 K
	R. S. Joists 4¾×1¾ and 3×1½	..	..	..	..	..	..	97 42	10 10 3 Manzai.	1,036 K
2060, dated 12-3-25	R. S. Joists 18×7	..	..	..	30 90	12 4 0 Karachi.	377 K	..	..	..

	R. S. Joists 12×6	..	..	..	92 64	10 0 0 Karachi.	926 K	..	..	..
	R. S. Joists 10×5	..	..	..	..	..	..	64 32	7 8 0 Karachi.	482 K
	R. S. Joists 12×6	..	..	..	..	..	..	46 32	7 4 0 Karachi.	336 K
2060-1, dated 20-3-25	M. S. Plates 8×4×⅜	..	..	..	..	..	..	13 13	8 0 0 Karachi.	105 K
	R. S. Joists 10×5	..	..	..	..	..	..	22 56	7 8 0	167 K
2063, dated 25-2-25	M. S. Plates 8′×4′×¼″	..	..	..	..	..	..	14 64	10 14 0 Bannu.	158 K
2066-1, dated 25-2-25	M. S. Angles 2½″×2½″×¼″	..	..	..	..	..	..	25 0	9 2 0 Bakhshan Khan.	228 K
2066-2, dated 25-2-25	M. S. Rounds 1 inch	..	..	..	..	..	..	56 83	9 11 0 Bakhshan Khan.	550 K
2066-3, dated 25-2-25	M. S. Rounds 1 inch	..	..	..	..	..	..	21 70	9 13 0 Bakhshan Khan.	212 K
								33 42	9 13 6 Bakhshan Khan.	329
2069-1, dated 27-2-25	R. S. Beams of sizes	..	..	..	159 49	10 0 0 Karachi.	1,594 K	..	..	..
2083-1, dated 5-3-25	R. S. Beams of sizes	..	..	..	..	..	..	37 2	6 14 0 Karachi.	255 K
2096, dated 20-2-25	M. S. Round ⅜″	..	..	..	..	..	..	10 0	10 6 0 Kohat.	104 K
	M. S. Round ½″	..	..	..	..	..	..	10 0	10 10 0 Kohat.	106 K
2100-1, dated 12-3-25	M. S. Rounds ¾″ and ⅝″	Ton Cwt. 38 10	197 0 0 Delhi.	7,585 J	..	..	..	..	..	..
2100-3, dated 18-4-25	M. S. Rounds ¼″	..	..	..	..	..	..	460 0	10 4 0 Delhi.	4,715 K

Order No. and Date.	Particulars.	TATAS.			BRITISH.			CONTINENTAL.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.
2122, dated 19-3-25	Angles 3 × 3 × ⅜	..	..	..	..	..	..	19 26	7 12 0 Karachi.	149 K
	Flats of sizes	..	..	..	..	..	..	49 72	7 8 0 Karachi.	372 K
	Rounds of sizes	..	..	..	..	..	..	19 68	7 8 0 Karachi.	147 K
2122-1, dated 23-3-25	M. S. Plates 8′ × 4′ × ¼″ and 5/16″	..	..	..	..	..	..	40 8	9 0 0 Karachi.	361 K
	M. S. Plates 8′ × 4′ × ⅜″	..	..	..	..	..	..	13 13	8 0 0 Karachi.	105 K
2135, dated 3-3-25	Angle iron 2½ × 2½ × ¼	..	..	..	..	..	..	72 81	8 0 0 Karachi.	582 K
2137, dated 2-3-25	M. S. Rounds ⅞″	..	..	..	..	..	..	19 28	8 4 0 Karachi.	159 K
2149, dated 9-3-25	M. S. Angles of sizes	..	..	..	..	..	..	16 cwts.	7 4 0	116 K
	M. S. Rounds ½	..	..	..	..	..	..	20 0	7 12 0	155 K
2163-1, dated 13-3-25	M. S. Plate ½″	..	..	..	..	..	..	16 44	8 2 0	133 K
2163-2, dated 23-3-25	M. S. Plates ⅜″	..	..	..	..	..	..	62 94	7 6 0	463 K
2165, dated 24-2-25	M. S. Tee 1½ × 1½ × ¼	..	..	..	..	..	..	726 21	7 12 0	5,628 B
2169, dated 13-3-25	R. J. Joists 6″ × 3″	..	..	..	..	..	..	144 72	7 12 0	1,121 K
2169-1, dated 16-3-25	R. S. Joists 6″ × 3″	..	..	..	..	..	..	115 80	8 0 0	926 K
2171, dated 12-3-25	M. S. Square ¼	..	..	..	..	..	..	21 0	7 10 0	160 K
2177, dated 14-3-25	R. S. Joists 7″ × 4″	..	..	..	..	..	..	100 20	6 12 0	76 K
2210-1, dated 10-3-25	R. S. Joists 9″ × 4″	..	..	..	600 0	9 8 0 Howrah.	5,700 C	..	..	..

	R. S. Joists 5″×3″	392 96	8 7 0 Howrah.	3,315 C	..	..	..	..	..	..
2210-2, dated 10-3-25	R. S. Joists 9″×4″	300 0	8 12 0 Howrah.	2,625 C	..	..	..	..	..	..
2210-3, dated 10-3-25	R. S. Joists 3″×1½″	..	..	..	..	..	..	857 16	7 4 0	6,214 B
	R. S. Joists 4″×1¾″	..	..	..	..	..	..	669 72	6 12 0	4,520 B
2210-4, dated 10-3-25	M. S. Tee 1½×1½×¼	..	..	..	..	..	..	75 0	7 14 0	591 B
2238, dated 17-3-25	M. S. Tee 2″×2″×7/32″ to ¼″	..	..	..	..	..	..	466 0	6 14 0	3,204 K
2257-6, dated 10-3-25	M. S. Angles 1¾×1¾×¼	..	..	..	..	..	..	50 0	8 0 0 Howrah	400 C
2257-8, dated 10-3-25	M. S. Angles 2½×2½×⅜	..	..	..	..	..	..	50 0	7 4 0 Howrah.	363 C
2257-11, dated 10-3-25	M. S. Angles 2½″×2½″×⅜	..	..	..	..	..	..	50 0	9 10 0 Lahore Cantt.	481 B
2257-15, dated 10-3-25	M. S. Angles 2½×2½×⅜	..	..	..	..	..	..	50 0	7 3 0 Karachi.	350 K
2257-16, dated 10-3-25	M. S. Angles 1¾×1¾×¼	..	..	..	..	..	..	50 0	7 4 0 Karachi.	363 K
2257-17, dated 17-3-25	R. S. Joists 6×3	..	..	..	..	..	..	25 80	7 4 0 Karachi.	186 K
2269, dated 11-3-25	M. S. Angles 1½×1½×¼	..	..	..	..	..	..	100 0	7 6 0	738 B
2292, dated 23-3-25	M. S. Rounds ⅝	..	..	..	..	..	..	14 0	7 8 0	105 K
1298-1, dated 5-12-24	R. S. Beams 5″×3″ and 6″×3″	662 56	8 15 9⅗ Amritsar.	23,998 J	..	..	..	..	..	..
	M. S. Channels 8″×3½″ and 6″×3″.	2,007 74								
	M. S. Angles 4″×4″, 3″×3″, 2½″×2½″ and 2¼″×2¼″.	[illegible],560 89								
	M. S. Plates 9′×18″, 15′×32″, 12′×6′, etc.	7,200 100	9 6 9⅗ Amritsar.	1,36,854 J						
	M. S. Flats 4″×⅞″, 3″×1″, 5″×⅜″.	588 69								
	M. S. Square 1¼″×1¼″	28 52								
	M. S. Rounds 1⅞″×1¾″, 1⅝″, 1¼″ dia.	952 20								
	M. S. Round bars ¾″ dia.	1,200 0								

Order No. and Date.	Particulars.	Tatas.			British.			Continental.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.
1298-1A, dated 6-12-24	M. S. Angles 6″×3″×½″	..	..	..	2,370 46	12 11 0 Amritsar.	30,075 C	..	..	..
1298-1-B, dated 12-12-24	R. S. Reams 12″×8″	..	..	..	437 77	9 13 0 Karachi.	4,295 K	..	..	..
	M. S. Channels 8″×3″	..	..	..	191 14	9 7 0 Karachi.	3,899 K	..	..	..
	M. S. Angles 3½″×3½″×⅜″	..	..	..	222 0					
	M. S. Rounds 7″ dia.	..	..	..	252 12	11 15 0 Karachi.	3,010 K	..	..	..
1298-3, dated 19-12-24	M. S. Channels 4″×2″	28 48	9 12 0 Amritsar.	541 J	..	..	..	..	..	..
	M. S. Flats 6″×½″	27 7								
	M. S. Angles 6″×6″×½″	26 22	9 8 0 Amritsar.	249 J	..	..	..	..	..	..
2079-2, dated 27-3-25	R. S. Beams 8″×4″	..	..	..	..	..	..	57 69	8 12 0 Multan	504 K
	R. S. Beams 12″×5″	..	..	..	319 56	13 8 0 Multan.	4,313 C	..	..	..
1538-1, dated 9-12-24	M. S. Angles 1½″×1½″×¼″	..	..	..	..	..	..	120 7	7 8 0 Karachi.	860 K
1538-2, dated 9-12-24	M. S. Angles 1″×1″×¼″	..	..	..	..	..		97 111	7 8 0 Karachi.	742 K

1925-26.

2293-2, dated 15-4-25	R. S. Beams 10 × 5	..	..	..	..	..	..	14 52	7 4 0 Karachi.	105
	R. S. Beams of sizes	..	..	..	..	..	..	25 28	7 0 0 Karachi.	177

सत्यमेव जयते

	R. S. Beams of sizes	..	..	..	..	..	..	18 44	7 8 0 Karachi.	138
2316-1, dated 8-4-25	R. S. Joists 4 × 1¾	..	..	..	..	..	..	24 107	7 5 0 Karachi.	183
	R. S. Joists 8 × 4	..	..	..	..	..	..	16 37	7 0 0 Karachi.	114
	R. S. Joists 4 × 1¾	..	..	..	..	..	..	21 49	7 5 0 Karachi.	157
	R. S. Joists 4¾ × 1¾	..	..	..	..	..	..	16 46	7 4 0 Karachi.	119
2340, dated 14-4-25	R. S. Beams 9 × 4 and 10 × 5 and M. S. Tee 2 × 2 × ¼.	..	..	..	..	..	..	42 34	7 15 0 Larkana.	336 K
2340-2, dated 14-4-25	R. S. Joists 3 × 1½	..	..	..	..	..	..	16 104	8 6 0 Larkana.	142 K
	R. S. Joists 4 × 1¾	..	..	..	..	..	..	48 109	8 8 0 Larkana.	416 K
	R. S. Joists 3 × 1½	..	..	..	..	..	..	75 0	8 4 0 Larkana.	619 K
	R. S. Joists 4 × 1¾	..	..	..	..	..	..	26 83	8 8 0 Larkana.	227 K
2344-3, dated 30-3-25	R. S. Beams 6 × 3, 7-9 × 4	..	..	..	..	..	..	387 84	7 2 0	2,763 K
N-2367-1, dated 17-4-25	M. S. Angle 2½ × 2½ × ½	..	..	..	..	..	..	27 0	7 8 0	203 K
N-2367-4, dated 4-5-25	M. S. Plates ⅜ × ½	..	..	..	..	..	..	126 86	8 8 0	1,078 K
2367-5, dated 4-5-25	M. S. Plates ¼	..	..	..	..	..	..	52 51	8 6 0	439 K
2381-3, dated 24-4-25	R. S. Beams 7′-9″ × 4″	..	..	..	..	..	..	60 106	6 14 0	481 K
N-2385, dated 17-4-25	M. S. Round bars ¼	..	..	..	..	..	..	24 90	7 11 0	191 K
	M. S. Round bars ¼	..	..	..	..	..	..	57 90	7 11 0	444 K
	M. S. Round bars $\frac{5}{16}$	..	..	..	..	..	..	20 108	7 12 0	156 K
	M. S. Round bars ½	..	..	..	..	..	..	13 62	7 12 0	105 K
N-2398, dated 15-4-25	M. S. Angles 2½ × 2½ × ½	77 97	8 8 0 Tatanagar.	662	..	..	..	..	..	..
2408-1, dated 5-5-25	M. S. Rounds ⅜	..	..	..	..	..	..	35 tons	9 15 0 Delhi.	6,956 K

Order No. and Date.	Particulars.	TATAS.			BRITISH.			CONTINENTAL.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.
2417, dated 21-4-25 .	M. S. Flat 1½ × ¼ . . .	..	..	..	..	..	..	25 0	7 10 0	191 K
	M. S. Round ½ . . .	..	..	..	..	..	..	15 0	7 12 0	116 K
2419-2, dated 22-5-25 .	M. S. Angles 1″ × 1″ × ¼″ .	..	..	..	..	..	..	285 0	9 4 2 Lahore Cantt.	2,639 K
	M. S. Tee 1½ × 1½ × ¼ .	..	..	..	..	..	..	400 0	9 12 2 Lahore Cantt.	3,904 K
	M. S. Sheets 1/16″ . . .	..	..	..	..	..	..	48 84	10 12 2 Lahore Cantt.	524 K
2419-3, dated 22-5-25 .	M. S. Channels 3 × 1½ . .	100 0	12 0 3 Lahore Cantt.	1,202 C	..	..	..	..	..	..
2419-4, dated 22-5-25 .	M. S. Angles 2″ × 2″ × ¼″ .	..	..	..	..	..	..	300 0	7 12 0 Howrah.	2,325
2419-5, dated 22-5-25 .	M. S. Channels 4 × 2 . .	100 0	12 12 0 Lahore Cantt.	1,275 C	..	..	..	..	..	..
2419-11, dated 12-6-25 .	M. S. Angles 1″ × 1″ × ¼″ and 1¼ × 1¼ × ¼″.	..	..	..	..	..	..	115 0	7 3 6	830 K
2419-12, dated 13-6-25 .	M. S. Angles 2½ × 2½ × ¼″ .	..	..	..	..	..	..	60 0	7 15 0	476 B
2419-13, dated 17-6-25 .	M. S. Rounds ½″ × ¾″ . .	..	..	..	..	..	..	600 0	7 4 0	4,350 B
	M. S. Rounds ⅜ . . .	..	..	..	..	..	..	400 0	7 10 0	3,050 B
	M. S. Rounds ¼ . . .	..	..	..	..	..	..	400 0	7 14 0	3,150 B
	M. S. Rounds ⅝ . . .	..	..	..	..	..	..	300 0	7 4 0	2,175 B
	M. S. Rounds ⅞ . . .	..	..	..	..	..	..	100 0	7 0 0	700 B
	M. S. Flats 1″ × ¼″	..	..	..	..	..	..	100 0	7 8 0	750 B

	M. S. Flats 1½ × ¼	..	..	..	..	..	..	400 0	7 4 0	2,900 B
	M. S. Flats 2 × ¼	..	..	..	..	..	..	300 0	7 2 0	2,138 B
	M. S. Flat 2½″ × ¼″	..	..	..	..	..	..	200 0	7 4 0	1,450 B
	M. S. Square ¼″	..	..	..	..	..	..	200 0	8 2 0	1,625 B
	M. S. Square ⅜″	..	..	..	..	..	..	200 0	7 8 0	1,500 B
	M. S. Angles 1½″ × 1½″ × ¼″	..	..	..	..	..	..	400 0	7 4 0	2,900 B
	M. S. Angles 2 × 2 × ⅜	..	..	..	..	..	..	100 0	7 6 0	738 B
	M. S. Plate ¼″	..	..	..	..	..	..	81 108	7 4 0	594 B
2419-14, dated 24-6-25	M. S. Angles 2½ × 2½ × ¼	..	..	..	..	..	..	140 0	7 0 0	980 K
2439-2, dated 14-5-25	M. S. Angles 2½ × 2½ × ¼	..	..	..	..	..	..	144 64	8 0 0	1,157 K
2439-3, dated 26-5-25	M. S. Flat 2″ × ¾″	..	..	..	..	..	..	57 34	7 8 0	430 K
	M. S. Flat 2½ × ½″	..	..	..	..	..	..	34 73	7 3 0	249K
2446, dated 14-5-25	M. S. Flat 1½ × ¼	..	..	..	..	..	..	34 0	7 10 0	259 K
2447, dated 14-5-25	R. S. Beams 7″ × 4″	..	..	..	..	..	..	24 0	6 14 0	165 K
2458, dated 14-5-25	M. S. Round 1″	..	..	..	..	..	..	40 0	7 4 0	290 K
2472, dated 15-5-25	R. S. Beams 10″ × 5, 12″ × 5″ and 9″ × 4″.	..	..	..	37 67	10 4 0 Karachi.	385	..	..	..
2524, dated 25-5-25	R. S. Beams 7″ × 4″	..	..	..	..	..	..	52 64	6 12 0	355 K
	R. S. Beams 6″ × 3″	..	..	..	..	..	..	40 74	6 14 0	280 K
	R. S. Joists 5 × 3	..	..	..	..	..	..	17 98	6 4 0	112 K
2525, dated 22-5-25	M. S. Channel 4 × 2	..	..	..	40 0	11 8 0 Karachi.	460	..	..	..
2522, dated 20-5-25	M. S. Sheets ⅛″ and Plates ¼″	..	..	..	..	..	..	43 80	7 14 0	344 K
2537, dated 18-5-25	M. S. Plates ¼	..	..	..	..	..	..	52 51	7 14 0	413 K
2599-2, dated 16-6-25	M. S. Flat 1½ × ¼	..	..	..	..	..	..	15 0	7 8 0	113 K
2620, dated 11-6-25	M. S. Plates ¼″	..	..	..	..	..	..	20 0	7 14 0	158 K
	M. S. Sheets ⅛″	..	..	..	..	..	..	20 0	7 13 6	157 K

Order No. and Date.	Particulars.	TATAS.			BRITISH.			CONTINENTAL.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.
N-2646-1, dated 17-6-25 .	M. S. Angles 2¼″ × 2¼″ × ¼″ .	..	..	..	18 0	8 0 0 Karachi.	144	..	..	..
2664-6, dated 30-6-25 .	M. S. Hoop 2 × ⅛ . . .	..	..	..	..	..	..	20 0	6 12 0	135 K
	M. S. Sheets ⅛″ . . .	..	..	..	..	..	..	20 0	7 14 0	158 K
	M. S. Sheets 1/14 . . .	..	..	..	..	..	..	20 0	9 0 0	180 K
2664-12, dated 23-7-25 .	Tool Steel ¾″, 1″, 1¼″ . .	..	..	..	1 56	75 11 0 Quetta.	114 K	..	..	..
N-2671-1, dated 23-6-25 .	M. S. Square ⅜″ . . .	..	..	..	..	..	..	21 0	7 8 0	158 K
2671-3, dated 27-6-25 .	M. S. Flat 1½ × ¼ . . .	..	..	..	..	..	..	100 0	10 3 9 Bannu.	1,023 K
2671-4, dated 27-6-25 .	M. S. Flat 1½ × ⅛ . . .	..	..	..	..	..	..	25 0	9 9 9 Bannu.	240 K
2677-3, dated 26-6-25 .	M. S. Angles 1½ × ¼ . .	..	..	..	..	..	..	30 0	9 14 0 Rawalpindi.	296 K
	M. S. Sheets 1/16 . . .	..	..	..	..	..	..	25 8	12 1 6 Rawalpindi.	303 K
2685, dated 23-6-25 .	Tee Iron 3 × 3 × ½ . .	..	..	..	20 0	11 2 3 Amritsar.	223 K	..	..	..
2690, dated 24-6-25 .	M. S. Plates ½ × ¼ . . .	..	..	..	..	..	..	26 28	11 1 6 Bannu.	291 K
2711-1, dated 4-9-25 .	R. S. Beams 10 × 5 .	..	..	..	..	..	..	14 52	7 8 5 Rohri.	109 K
	R. S. Beams 10″ × 5″ and 9″ × 4″	..	..	..	..	..	..	17 52	7 10 5 Rohri.	184 K

	R. S. Beams 7″ and 8″ × 4″ .	..	..	..	..	..	..	13 96	7 14 5 Rohri.	109 K
2711-2, dated 31-8-25	R. S. Joists 4″ × 1¾″, 3″ × 1½″.	..	..	..	..	..	..	223 64	8 4 0 Rohri.	1,844 K
	R. S. Joists 4 × 1¾ . .	..	..	..	..	..	..	290 85	8 4 0 Rohri.	2,399 K
	R. S. Joists 3 × 1½ . .	..	..	..	..	..	..	56 40	8 2 0 Rohri.	458 K
	R. S. Joists 4 × 1¾ . .	..	..	..	..	..	..	68 14	8 4 0 Rohri.	562 K
	R. S. Joists 3 × 1½ . .	..	..	..	..	..	..	26 68	8 2 0 Rohri.	216 K
	R. S. Joists 4 × 1¾ . .	..	..	..	..	..	..	68 14	8 4 0 Rohri.	562 K
	R. S. Joists 3 × 1½ . .	..	..	..	..	..	..	26 68	8 2 0 Rohri.	216 K
N-2714, dated 30-6-25 .	R. S. Joists 3 × 1½ . .	..	..	..	..	..	..	32 40	7 14 3 Jhol.	255 K
	R. S. Joists 4 × 1¾ . .	..	..	..	..	..	..	15 25	7 15 3 Jhol.	121 K
	R. S. Joists 4 × 1¾ . .	..	..	..	..	..	..	16 25	7 15 3 Jhol.	121 K
2715, dated 25-6-25 .	R. S. Joists 4 × 1¾ .	..	..	..	..	..	..	14 7	7 5 9 Jungshahi.	103 K
	R. S. Joists 4 × 1¾ . .	..	..	..	..	..	..	61 98	7 5 9 Jungshahi.	455 K
	R. S. Joists 4 × 1¾ . .	..	..	..	..	..	..	18 9	7 5 9 Jungshahi.	133 K
2715-2, dated 25-6-25 .	R. S. Joists 4 × 1¾ . .	..	..	..	..	..	..	22 71	7 9 9 Jungshahi.	172 K
2722, dated 23-6-25 .	R. S. Beams 6 × 3 . .	..	..	..	..	..	..	21 0	9 2 0 Amritsar.	192 K
7243-1, dated 3-7-25 .	R. S. Joists 6 and 5 × 3 . .	..	..	..	68 80	12 13 6 Risalpur.	883 K	..	..	..

Order No. and Date.	Particulars.	Tatas.			British.			Continental.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost	Weight.	Rate per cwt.	Cost.
		Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.
2743-2, dated 13-7-25	R. S. Joists 3 × 1½	..	..	..	..	..	..	18 48	9 15 9 Risalpur.	184 K
	R. S. Joists 5 × 3	..	..	..	..	..	..	201 30	9 7 9 Risalpur.	1,909 K
	R. S. Joists 5 × 3	..	..	..	..	..	..	10 68	9 7 9 Risalpur.	101 K
2746-1, dated 18-7-25	M. S. Rod ½" square	..	..	..	..	..	..	66 0	9 11 3 Khewra.	640 K
2760-1, dated 18-7-25	M. S. Round ½"	..	..	..	..	..	..	40 0	10 0 0 Amritsar.	400 K
	M. S. Round ¾ and 1¼"	..	..	..	..	..	..	40 0	9 10 0 Amritsar.	385 K
2760-3, dated 13-7-25	M. S. Plates 1/16"	..	..	..	..	..	..	20 0	10 8 0 Amritsar.	210 K
2761-1, dated 10-7-25	R. S. Beams 6 × 3	..	..	..	74 64	12 14 3 Lodhran.	961 C	..	..	..
2761-2, dated 10-7-25	R. S. Beams 8 × 4	..	..	..	32 88	11 10 3 Lodhran.	382 K	..	..	..
	R. S. Beams 10 × 5	..	..	..	19 32	11 10 3 Lodhran.	224 K	..	..	..
2761-3, dated 10-7-25	R. S. Beams 9 × 4	..	..	..	60 84	11 2 0 Lodhran.	676 K	..	..	..
2770-6, dated 18-7-25	M. S. Round ⅜	..	..	..	..	..	..	20 0	10 0 0 Sialkote.	200 K
2788-2, dated 23-7-25	R. S. Girders 9 × 4	..	..	..	..	..	..	17 81	7 14 0 Bagarji.	140 K
	R. S. Girders 4 × 1¾	..	..	..	..	..	..	245 105	8 0 0 Bagarji.	1,966 K

788-3, dated 23-7-25	R. S. Joists 3 × 1½	..	..	..	..	..	..	62 72	7 14 6 Larkana.	495 K
2840-2, dated 29-8-25	M. S. Round 1½" and 3"	..	..	..	..	..	..	14 49	8 5 0 Sukkur.	120 K
2858, dated 18-8-25	M. S. Sheet ¼"	..	..	..	..	..	..	16 44	11 4 0 Girni Road.	184 K
2863-1, dated 4-8-25	R. S. Beams 12" × 6"	..	..	..	..	..	..	103 80	9 2 0 Havelian.	946 K
2881, dated 22-7-25	M. S. Round ¼	..	..	..	..	..	..	20 0	10 8 0 Quetta.	210 K
2904, dated 29-8-25	M. S. Sheet 1/16	..	..	..	..	..	..	20 0	10 8 0 Quetta.	210 K
2904-6, dated 29-8-25	M. S. Sheet ⅛	..	..	..	..	..	..	20 0	9 7 0 Quetta.	189 K
2904-8, dated 29-8-25	M. S. Angle 2 × 2 × ¼	..	..	..	..	..	..	15 0	8 11 6 Quetta.	131 K
2923-1, dated 22-8-25	R. S. Beams 6 × 3	..	..	..	..	..	..	40 44	8 15 0 Delhi.	361 K
	R. S. Beams 6 × 3	..	..	..	..	..	..	53 67	9 3 0 Delhi.	492 K
	R. S. Beams 4 × 3	..	..	..	..	..	..	21 42	9 7 0 Delhi.	202 K
2923-2, dated 22-8-25	R. S. Beams 4¾ × 1¾	..	..	..	..	..	..	27 86	9 1 9 Delhi.	253 K
2946, dated 30-9-26	R. S. Beams 16 × 6, 15 × 5, 12 × 5.	..	..	..	375 52	7 13 11 Hyderabad (Sind.)	2,955 K	..	..	..
	R. S. Beams 10 × 5, 9 × 4, 8 × 4, 7 × 4.	..	..	..	109 109	7 13 11 Hyderabad (Sind).	865 K	..	..	..
	R. S. Joists 4 × 1¾	..	..	..	737 66	7 13 11 Hyderabad (Sind).	5,805 K	..	..	..
	R. S. Joists 3 × 1½	..	..	..	106 59	7 13 11 Hyderabad (Sind).	838 K	..	..	..

Order No. and Date.	Particulars.	TATAS.			BRITISH.			CONTINENTAL.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwts. lbs.	Rs. A. P.	Rs.	Cwts. lbs.	Rs. A. P.	Rs.	Cwts. lbs.	Rs. A. P.	Rs.
3003-1, dated 11-9-25 .	R. S. Beams 15 × 5 . .	..	..	..	..	..	..	45 0	10 4 0 Thall.	461 K
	R. S. Beams 10 × 5 . .	..	..	..	..	..	..	11 13	9 2 0 Thall.	101 K
3003-2, dated 11-9-25 .	R. S. Joists 6 × 3 . . .	..	..	..	..	..	..	24 72	9 10 0 Thall.	237 K
3007-1, dated 7-9-25 .	R. S. Joists 7 × 4 . . .	..	..	..	..	..	..	22 96	9 6 0 Peshawar.	214 K
	R. S. Joists 5 × 3 . . .	..	..	..	..	..	..	138 33	9 4 0 Peshawar.	1,279 K
3007-4, dated 7-9-25 .	M. S. Tee 1½ × 1½ × ¼ . .	..	..	..	17 7	11 1 0 Peshawar.	199 K	..	..	..
3007-2, dated 12-9-25 .	M. S. Tee 1½ × 1½ × ¼ . .	..	..	..	..	..	..	208 4	14 0 0 Peshawar.	2,912 B
3007-7, dated 6-10-25 .	M. S. Tee 1½ × 1½ × ¼ . .	..	..	..	..	..	..	45 91	14 0 0 Peshawar.	641 B
3012-1, dated 11-9-25 .	R. S. Joists 9 × 4 . .	..	..	..	..	..	..	204 84	11 0 0 Kohat.	2,254 C
3012-2, dated 11-9-25 .	R. S. Joists 9×4 . . .	157 25	11 7 0 Kohat.	1,798 Delhi.	..	..	..	..	..	..
3012-3, dated 12-5-25 .	R. S. Joists 9×4 . . .	..	..	..	..	..	..	62 18	9 10 0 Kohat.	598 K
	R. S. Joists 5×3 . . .	..	..	..	..	..	..	226 101	9 6 0 Kohat.	2,127 K
	R. S. Joists 4×1¾ . . .	..	..	..	..	..	..	80 33	9 14 0 Kohat.	793 K
	M. S. Angles 1½×1½×¼ .	..	..	..	..	..	..	30 77	9 14 0 Kohat.	303 K

3012-4, dated 11-9-25	M. S. Tee 1½×1½×¼	..	..	..	..	..	..	181 0	9 0 0 Howrah.	1,629 C
3012-5, dated 11-9-25	M. S. Tee 1½×1½×¼	..	..	..	..	..	..	405 75	12 10 0 Kohat.	5,122 C
3012-6, dated 11-9-25	R. S. Joists 4¾×1¾	..	..	..	..	..	..	33 42	10 3 9 Kohat.	342 K
3012-7, dated 21-9-25	R. S. Joists 6×3	..	..	..	57 96	11 12 9 Kohat.	683 K	28 104	9 8 9 Kohat.	276 K
3012-7, dated 25-9-25	R. S. Joists 6×3	43 44	11 7 0 Kohat.	496 Delhi.	..	..	..	..	..	..
3012-8, dated 22-10-25	R. S. Joists 5×3	..	..	..	..	..	..	145 0	11 0 0 Kohat.	1,395 C
3016, dated 7-9-25	R. S. Joists 5×3	..	..	..	..	..	..	33 69	9 5 6 Jamrud.	314 K
3022-1, dated 9-9-25	M. S. Angles 2×¼	..	..	..	..	..	..	14 28	9 2 3 Amritsar.	128 K
3022-2, dated 9-9-25	M. S. Angles 3×3×⅜	..	..	..	..	..	..	153 96	10 13 0 Amritsar.	1,668 C
3022-4, dated 1-10-25	M. S. Angles 5×3×½	..	..	..	..	..	..	68 34	13 0 0 Amritsar.	888 B
3070-1, dated 15-9-25	M. S. Tee 1-½×1-½×¼	..	..	..	25 31	14 9 9 Peshawar.	370 C	..	..	..
	M. S. Tee 1¾×1¾×¼	..	..	..	65 0	14 7 9 Peshawar.	942 C	..	..	..
3070-2, dated 15-9-25	R. S. Joists 4×3	..	..	..	149 32	8 12 0 Howrah.	1,306 C	..	..	..
3070-3, dated 15-9-25	R. S. Joists 5×3	..	..	..	..	..	..	112 105	9 3 0 Peshawar.	1,052 K
	R. S. Joists 4×3	..	..	..	..	..	..	24 67	9 15 0 Peshawar.	244 K
3072-1, dated 15-9-25	R. S. Joists 3×1½, 4×1¾	..	..	..	..	..	..	50 13	7 12 0 Phulji.	385 K
	R. S. Joists 9×4	..	..	..	..	..	..	34 98	7 7 9 Phulji.	261 K
	R. S. Joists 4×1¾ & 3×1-½	..	..	..	..	..	..	74 82	7 10 9 Phulji.	586 K

Order No. and Date.	Particulars.	Tatas.			British.			Continental.		
		Weight.	Rate per cwt.	Costs.	Weight.	Rate per cwt.	Costs.	Weight.	Rate per cwt.	Cost.
		Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.
3161, dated 21-9-25 .	R. S. Joists 12×5 . . .	..	..	..	..	..	..	13 80	9 12 0 Bannu.	134 K
3174, dated 25-9-25 .	R. S. Joists 4×1¾ . . .	..	..	..	..	..	..	74 72	7 5 0 Jungshahi.	545 K
3183, dated 21-9-25 .	R. S. Joists 12×5 . . .	..	..	..	..	..	..	30 0	10 10 0 Nowabshah.	319 K
3224-1, dated 5-10-25 .	M. S. Angles 1½×1½×¼ . .	..	..	..	..	..	..	13 78	9 15 9 Nowshera.	137 K
3013-1, dated 19-9-25 .	M. S. Hoop 1×1/16 . . .	..	..	..	..	..	..	10 0	10 4 0 Peshawar.	103 K
3140, dated 21-9-25 .	M. S. Hoop 1×1-16 . .	..	..	..	..	..	..	20 0	10 0 6 Peshawar.	208 K
3224-2, dated 5-10-25 .	R. S. Joists 7×4 . . .	..	..	..	..	..	..	69 48	9 5 9 Nowshera.	650 K
	R. S. Joists 7×4 . . .	..	..	..	..	..	..	25 16	9 3 9 Nowshera.	232 K
	R. S. Joists 6×3 . . .	..	..	..	64 92	9 4 0 Karachi.	600 K	..	..	..
	M. S. Tee 1½×1½×¼ . .	..	..	..	36 45	10 15 9 Nowshera.	400 K	..	..	..
	R. S. Joists 3×1½ . . .	..	..	..	..	..	..	85 80	9 9 9 Nowshera.	824 K
	M. S. Tee 1½×1½×¼ . .	..	..	..	454 92	10 15 9 Nowshera.	4,996 K	..	..	..
	M. S. Tee 1½×1½×¼ . .	..	..	..	18 70	12 3 9 Nowshera.	228 K	..	..	..
3224-3, dated 5-10-25 .	R. S. Joists 5×3 . . .	..	..	..	..	..	..	112 62	10 15 0 Nowshera.	1,231 B

3239-1, dated 9-10-25	M. S. Round ½	..	..	..	..	..	..	260 0	10 0 0 Pakpattan.	2,600 K
3239-2, dated 9-10-25	M. S. Round ½	..	..	..	..	..	..	100 0	9 13 6 Pakpattan.	984 K
3276-3, dated 16-10-25	R. S. Joists 4×1¾	..	..	..	..	..	..	11 28	10 0 0 Ambala.	113 B
	R. S. Joists 5×3	..	..	..	..	..	..	23 92	10 4 0 Ambala.	244 B
3276-4, dated 16-10-25	M. S. Tee 1½×1½×¼	..	..	..	9 22	13 7 9 Ambala.	124 C	..	..	..
	M. S. Tee 1½×1½×¼	..	..	..	..	..	..	10 29	11 2 9 Ambala.	115 C
	M. S. Tee 1½×1½×¼	..	..	..	..	..	..	74 16	11 2 9 Ambala.	828 C
3276-6, dated 20-2-26	M. S. Tee 1½×1-½×¼	..	..	..	..	..	..	74 18	12 14 0 Ambala.	955 C
3282-1, dated 8-10-25	M. S. Tee 2×2×¼	..	..	..	..	..	..	163 20	8 8 0 Howrah.	1,387 C
3282-2, dated 8-10-25	R. S. Joists 15×5	..	..	..	..	..	..	82 56	9 15 0 Peshawar.	820 K
3298, dated 10-11-25	M. S. Rounds ½	..	..	..	..	..	..	360 0	10 0 0 Chahnur Mohamed.	3,600 K
3319-1, dated 16-10-25	R. S. Joists 10×5	..	..	..	..	..	..	80 70	10 0 0 Jhelum.	806 B
3319-2, dated 23-10-25	M. S. Tee 2¼×2-¼×¼	..	..	..	..	..	..	77 82	8 3 6 Howrah.	635 C
3351, dated 6-10-25	R. S. Joists 5×3	..	..	..	..	..	..	100 .89	6 12 0 Howrah.	680 C
3389-2, dated 23-10-25	R. S. Joists 6×3	..	..	..	..	..	..	49 60	10 5 7 Jamrud.	515 K
3507-1, dated 10-11-25	R. S. Beams 7×4	..	..	..	..	..	..	27 16	10 3 0 Khanewal.	277 B
3507-2, dated 10-11-25	R. S. Beams 12×5	..	..	..	..	..	..	56 64	8 10 6 Mian Channu.	490 K
	R. S. Beams 6×3	..	..	..	..	..	..	15 48	8 13 6 Mian Channu.	137 K

Order No. and Date.	Particulars.	TATAS.			BRITISH.			CONTINENTAL.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwts. lbs.	Rs. A. P.	Rs.	Cwts. lbs.	Rs. A. P.	Rs.	Cwts. lbs.	Rs. A. P.	Rs.
3507-3, dated 10-11-25	R. S. Beams 10 × 5	..	..	..	..	..	..	43 44	10 3 0 Mian Channu.	442 B
	R. S. Beams 12 × 5	..	..	..	..	..	..	94 32	10 7 0 Mian Channu.	982 B
3507-3, dated 10-11-25	R. S. Beams 5 × 3	..	..	..	..	..	..	16 23	10 6 0 Mian Channu.	168 B
3551, dated 21-10-25	R. S. Beams 12 × 5	..	..	..	..	..	..	28 64	7 9 0 Sukkur.	210 K
	R. S. Joists 4 × 1¾	..	..	..	..	..	..	53 74	7 12 0 Sukkur.	419 K
3558-1, dated 10-11-25	M. S. Round ½″	..	..	..	..	..	..	440 0	7 15 0 Karachi.	3,493 K
3558-2, dated 20-11-25	M. S. Round ½″	..	..	..	..	..	..	1,160 0	10 4 0 Hussainiwala.	11,890 K
3564-1, dated 12-11-25	R. S. Beams 6 × 3	..	..	..	..	..	..	171 48	9 9 0 Peshawar.	1,639 K
3564-2, dated 12-11-25	M. S. Tee 1-½ × 1½ × ¼	..	..	..	..	..	..	114 47	12 13 0 Peshawar.	1,466 C
3564-2, dated 23-11-25	M. S. Tee 1½ × 1½ × ¼	..	..	..	..	..	..	114 47	12 13 0 Peshawar.	1,466 C
3574-1, dated 18-11-25	M. S. Round ⅜	..	..	..	..	..	..	12 0	11 0 0 Meerut.	132 Delhi
3574-2, dated 18-11-25	M. S. Round ½	14 56	10 0 0 Meerut.	145 Delhi	..	..	..	..	..	..
	M. S. Flat 2″ × ¼″	16 0	10 8 0 Meerut.	168 Delhi	..	..	..	..	..	..

3627-1, dated 14-12-25	R. S. Beams 10 × 5	..	..	..	..	..	..	79 62	6 6 0 Karachi.	507 K
	R. S. Beams 9 × 4 & 7 × 4	..	..	...	..	..	..	211 0	6 10 0 Karachi.	1,398 K
3627-2, dated 14-12-25	R. S. Beams 6 × 3	..	..	..	29 64	9 0 0 Karachi.	266 K	..	..	..
	R. S. Beams 5 × 3	..	..	..	111 31	9 0 0 Karachi.	1,002 K	..	..	..
	R. S. Joists 4 × 1-¾	..	...	..	..	..	..	394 57	6 10 0 Karachi.	2,614 K
	R. S. Joists 3 × 1½	..	..	..	..	..	..	213 80	6 10 0 Karachi.	1,416 K
3645-1, dated 30-11-25	R. S. Beams 15 × 5	..	..	..	114 0	8 2 6 Janvri.	930 K	..	..	..
	R. S. Beams 9 × 4	..	..	..	34 56	7 7 6 Janvri.	258 K	..	..	..
	R. S. Beams 4 × 1¾	..	..	..	..	..	..	211 8	7 9 6 Janvri.	1,603 K
	R. S. Beams 3 × 1½	..	..	..	..	..	..	81 48	7 8 6 Janvri.	614 K
3645-2, dated 30-11-25	R. S. Beams 8 × 4 & 7 × 4	..	..	..	..	..	..	40 25	7 8 0 Janvri.	302 K
	R. S. Joists 6 × 3	..	..	..	..	..	..	49 56	7 9 0 Janvri.	374 K
3789-1, dated 16-12-25	R. S. Beams 12 × 6	..	..	..	..	..	..	81 80	8 8 9 Lahore Cantt.	698 K
	R. S. Beams 10 × 5	..	..	..	..	..	..	40 80	8 7 9 Lahore Cantt.	345 K
	R. S. Beams 8 × 4	..	..	..	..	..	..	28 86	8 11 9 Lahore Cantt.	251 K
	R. S. Beams 7 × 4	..	..	..	..	..	..	126 48	8 11 9 Lahore Cantt.	1,104 K
	R. S. Beams 4 × 3	..	..	..	..	..	..	15 106	9 6 9 Lahore Cantt.	150 K

Order No. and Date.	Particulars.	Tatas.			British.			Continental.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwts. lbs.	Rs. A. P.	Rs.	Cwts. lbs.	Rs. A. P.	Rs.	Cwts. lbs.	Rs. A. P.	Rs.
3789-2, dated 17-12-25 .	R. S. Beams 12 × 6 & 15 × 6 .	323 100	8 0 0 Howrah.	2,591 C	..	..	..	..	..	..
	R. S. Beams 6 × 3 . . .	199 26	7 14 0 Howrah.	1,569 C	..	..	..	..	..	..
3769-1, dated 14-12-25 .	R. S. Beams 10 × 5 . . .	..	..	..	..	..	..	70 80	8 14 0 Kohat.	628 K
	R. S. Joists 4¾ × 1¾ . .	..	..	..	..	..	..	107 41	9 6 0 Kohat.	1,007 K
3769-2, dated 14-12-25 .	R. S. Joists 4 × 1¾ . . .	..	..	..	..	..	..	13 39	9 7 9 Kohat.	127 K
	M. S. Tee 1½ × 1½ × ¼ . .	..	..	..	..	..	..	294 51	12 10 9 Kohat.	3,731 K
3769-3, dated 14-12-25 .	R. S. Beams 6 × 3 . . .	126 43	11 9 0 Kohat.	1,462 Delhi	..	..	..	..	..	..
	R. S. Beams 5 × 3 . . .	47 60	11 9 0 Kohat.	550 Delhi.	..	..	..	..	..	..
3979, dated 30-12-25 .	R. S. Beams 10 × 5 . .	36 108	9 8 0 Gujranwala.	351 Lahore.	..	..	..	..	..	..
3709-1, dated 9-12-25 .	R. S. Beams 24 × 7½ . .	..	..	..	956 28	9 15 8 Shahdara near Lahore.	9,543 K	..	..	..
3709-2, dated 9-12-25 .	R. S. Beams 15 × 5½ . .	102 0	8 8 0 Howrah.	867 C	..	..	..	..	..	
	R. S. Beams 20 × 7½ . .	..	..	..	324 24	9 14 0 Howrah.	3,202 C	..	..	..
3874, dated 30-12-25 .	R. S. Beams 14 × 6 & 9 × 4 .	..	..	..	389 21	8 14 0 Ganda Singhwala.	3,454 K	..	..	

	M. S. Angles 3×3×⅜	..	..	..	53 95	9 0 0 Ganda Singhwala.	485 K	..	..	..
	R. S. Beams 14×6 & 9×4	..	..	..	416 111	8 14 0 Ganda Singhwala.	3,701 K	..	..	..
	M. S. Angles 3×3×⅜	..	..	..	67 35	9 0 0 Ganda Singhwala.	606 K	..	..	..
3928-1, dated 7-1-26	R. S. Joists 12×6	..	..	..	81 80	11 11 8 Kohat.	958 K	..	..	..
	M. S. Tee 1½×1½×3/16	..	..	..	..	..	..	22 31	12 11 8 Kohat.	284 K
3928-2, dated 6-1-26	R. S. Joists 10×5	..	..	..	..	..	..	14 82	8 11 0 Kohat.	126 K
	R. S. Joists 8×4	..	..	..	..	..	..	36 72	8 15 0 Kohat.	328 K
	R. S. Joists 7×4	..	..	..	..	..	..	26 40	8 15 0 Kohat.	236 K
	R. S. Joists 5×3	..	..	..	..	..	..	14 104	8 11 0 Kohat.	130 K
	R. S. Joists 5×3	..	..	..	..	..	..	52 72	8 13 0 Kohat.	464 K
3928-3, dated 6-1-26	R. S. Joists 12×6	102 16	11 9 0 Kohat.	1,181 Delhi.	..	..	..	..	..	..
	R. S. Joists 6×3	294 42	11 9 0 Kohat.	3,404 Delhi.	..	..	..	..	..	..
3928-4, dated 8-1-26	R. S. Beams 10×5	..	..	..	..	..	..	21 48	8 11 0 Kohat.	186 K
3929-2, dated 4-1-26	R. S. Beams 4×1¾	..	..	..	..	..	..	13 29	8 12 6 Lahore Cantt.	116 K
	M. S. Tee 3×3×⅜	..	..	..	..	..	..	19 4	10 2 6 Lahore Cantt.	193 K
3929-3, dated 4-1-26	R. S. Beams 8×4 ¼	..	..	..	..	..	..	40 20	8 10 0 Lahore Cantt.	347 K
	M. S. Angles 1½×1½×¼	..	..	..	..	..	..	11 101	9 8 0 Lahore Cantt.	113 K

Order No. and Date.	Particulars.	TATAS.			BRITISH.			CONTINENTAL.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.
3966-2, dated 6-1-26	M. S. Tee 1-½×1-½×¼	..	..	..	..	..	..	11 64	14 0 0 Ferozepore Cantt.	162 B
3966-3, dated 7-1-26	R. S. Beams 7×4	..	..	..	..	..	..	68 64	8 8 0 Ferozepur Cantt.	583 K
	R. S. Beams 5×3	..	..	..	..	..	..	176 86	8 4 0 Ferozepur Cantt.	1,458 K
	M. S. Angle 1½×1½×¼	..	..	..	..	..	..	16 35	9 12 0 Ferozepur Cantt.	159 K
	M. S. Angle 1½×1½×¼	..	..	..	..	..	..	14 80	9 12 0 Ferozepur Cantt.	138 K
3966-4, dated 18-1-26	M. S. Tee 1½×1½×¼	..	..	..	..	..	..	162 32	12 3 8 Ferozepur Cantt.	1,990 K
4006, dated 30-12-25	R. S. Beams 10×5	14 52	9 8 0 Lahore.	137 L	..	..	..	..	..	..
4046-3, dated 15-1-26	R. S. Beams 14×6, 12×6, 12×5, 10×5, 8×4, 8×5, 9×4.	..	..	..	1272 74	9 3 1 Khai Phemeki.	11,699 K	..	..	..
	M. S. Angle 3×3×⅜	..	..	..	232 79	9 7 1 Khai Phemeki.	2,197 K	..	..	..
4052-1, dated 6-1-26	R. S. Beams 12×5, 5×3	107 0	10 10 0 Kasur.	1,137 D	..	..	..	..	..	..
4052-2, dated 6-1-26	R. S. Beams 15×5	..	..	..	155 28	9 3 9 Kasur.	1,434 K	..	..	..

	R. S. Beams 12×5	..	..	..	11 48	10 3 9 Kasur.	117 K	..	..	..
	R. S. Beams 9×4	..	..	..	36 0	10 6 9 Kasur.	375 K	..	..	..
4076, dated 13-1-26	M. S. Round $\frac{3}{8}$"	..	..	..	..	..	..	10 0	11 4 0 Meerut.	113 D
4204-3, dated 13-2-26	R. S. Joists 10×5, 9×4, 8×4, 7×4, 6×3.	409 54	10 8 0 Thall.	4,300 J	..	..	..	..	..	..
4330, dated 27-1-26	R. S. Beams 12×5	50 32	9 8 0 Delhi.	478 D	..	..	..	..	..	..
4349-1, dated 12-2-26	M. S. Rounds $\frac{1}{4}$×$\frac{3}{8}$	..	..	..	..	..	..	60 0	10 0 0 Lahore.	600 K
	M. S. Rounds $\frac{5}{16}$"	..	..	..	..	..	..	15 0	10 0 0 Lahore.	150 K
4349-2, dated 12-2-26	R. S. Beams 8×4, 6×3	..	..	..	35 22	10 8 6 Lahore.	371 K	..	..	..
4349-3, dated 12-2-26	R. S. Beams 10×5	95 100	10 10 0 Lahore.	1,019 D	..	..	..	..	..	..
3985-1, dated 15-1-26	R. S. Joists 6×3	..	..	..	94 38	11 2 6 Kohat.	1,053 K	..	..	..
	R. S. Joists 5×3	..	..	..	120 30	11 2 6 Kohat.	1,343 K	..	..	..
	R. S. Joists 4$\frac{3}{4}$×1$\frac{3}{4}$	..	..	..	208 26	10 2 6 Kohat.	2,115 K	..	..	..
	R. S. Joists 4×1$\frac{3}{4}$	..	..	..	..	..	..	600 45	9 0 6 Kohat.	5,422 K
3985-1, dated 15-1-26	R. S. Joists 3×1$\frac{1}{2}$	..	..	..	..	..	..	143 14	9 0 6 Kohat.	1,293 K
	M. S. Tee 1$\frac{1}{2}$×1$\frac{1}{2}$×$\frac{1}{4}$	..	..	..	..	..	..	800 0	12 2 6 Kohat.	9,725 K
3985-2, dated 15-1-26	R. S. Joists 4-$\frac{3}{4}$×1$\frac{3}{4}$	..	..	..	..	..	..	231 26	10 1 9 Kohat.	2,338 K
	M. S. Angles 1$\frac{1}{2}$×1$\frac{1}{2}$×$\frac{1}{4}$	..	..	..	..	..	..	130 0	9 7 9 Kohat.	1,233 K

Order No. and Date.	Particulars.	TATAS.			BRITISH.			CONTINENTAL.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.
3985-3, dated 15-1-26	R. S. Joists 10×5	..	..	..	..	..	..	522 36	8 12 0 Kohat.	4,570 K
	R. S. Joists 10×5	..	..	..	..	..	..	208 104	8 14 6 Kohat.	1,861 K
	R. S. Joists 10×5	..	..	..	..	..	..	42 21	8 12 0 Kohat.	369 K
	R. S. Joists 8×4	..	..	..	..	..	..	96 3	9 0 0 Kohat.	864 K
3985-4, dated 15-1-26	R. S. Joists 10×5	104 52	11 9 0 Kohat.	1,208 D	..	..	..	..	..	..
	R. S. Joists 5×3	667 56	11 9 0 Kohat.	7,718 D	..	..	..	..	..	..
3985-5, dated 18-1-26	M. S. Tee 1½×1½×¼	..	..	..	..	..	..	1160 0	9 12 0 Kohat.	11,310 K
3763-1, dated 5-1-26	M. S. Rounds 1"	..	..	..	..	..	..	164 79	8 5 0 Sukkur.	1,369 K
	M. S. Rounds 1½"	..	..	..	..	..	..	171 80	8 5 0 Sukkur.	1,427 K
	M. S. Rounds 1½"	..	..	..	..	..	..	645 72	8 0 0 Sukkur.	5,165 K
	M. S. Rounds 1⅓"	..	..	..	..	..	..	139 58	8 5 0 Sukkur.	1,160 K
	M. S. Rounds, 1½"	..	..	..	..	..	..	396 85	8 0 0 Sukkur.	3,174 K
3763-2, dated 5-1-26	M. S. Rounds 1"	..	..	..	..	..	..	584 47	9 0 0 Sukkur.	5,260 K
	M. S. Rounds 1½"	..	..	..	..	..	..	182 50	8 8 0 Sukkur.	1,551 K

3763-3, dated 5-1-26	M. S. Rounds 1½"	..	..	..	..	..	..	96 18	8 3 0 Sukkur.	787 K
4371-1, dated 19-2-26	M. S. Rounds ¼	..	..	..	..	..	..	19 80	10 0 0 Lahore Cantt.	197 K
	M. S. Rounds 5/16	..	..	..	..	..	..	37 0	10 2 0 Lahore Cantt.	375 K
	M. S. Rounds ⅜	..	..	..	..	..	..	47 60	10 4 0 Lahore Cantt.	488 K
4371-2, dated 18-2-26	R. S. Beams, 12×5, 15×5, 10×5.	134 0	10 11 0 Lahore.	1,432 D	..	..	..	..	..	..
4188-1, dated 9-2-26	R. S. Joists 10×5	..	..	..	67 101	10 4 0 Multan.	696 K	..	..	..
	R. S. Joists 10×5	..	..	..	130 65	9 12 0 Multan.	1,273 K	..	..	..
	R. S. Joists 10×5	..	..	..	637 26	9 4 0 Multan.	5,894 K	..	..	..
	R. S. Joists 5×3	..	..	..	51 52	9 8 0 Multan.	489 K	..	..	..
	R. S. Joists 5×3	..	..	..	15 1	9 4 0 Multan.	139 K	..	..	..
	R. S. Joists 5×3	..	..	..	46 91	9 4 0 Multan.	433 K	..	..	..
	R. S. Joists 5×3	..	..	..	63 39	9 8 0 Multan.	602 K	..	..	..
	R. S. Joists 5×3	..	..	..	109 90	9 4 0 Multan.	1,016 K	..	..	..
	R. S. Joists 5×3	..	..	..	114 86	9 8 0 Multan.	1,090 K	..	..	..
	R. S. Joists 5×3	..	..	..	80 104	9 4 0 Multan.	749 K	..	..	..
	R. S. Joists 5×3	..	..	..	32 101	9 8 0 Multan.	313 K	..	..	..
	R. S. Joists 6×3	..	..	..	101 28	9 8 0 Multan.	962 K	..	..	..

Order No. and Date.	Particulars.	TATAS.			BRITISH.			CONTINENTAL.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.
4188-1, dated 9-2-26—*contd.*	R. S. Joists 6×3	..	..	..	199 68	9 4 0 Multan.	1,846 K	..	..	..
	R. S. Joists 6×3	..	..	..	62 68	9 8 0 Multan.	591 K	..	..	..
	R. S. Joists 4×1¾	..	..	..	..	..	..	534 55	8 3 0 Multan.	4,343 K
	R. S. Joists 4¾×1¾	..	..	..	401 6	9 4 0 Multan.	3,710 K	..	..	..
	R. S. Joists 3×1½	..	..	..	..	..	..	110 75	8 2 0 Multan.	899 K
4188-2, dated 8-2-26	R. S. Joists 5×3, 4×1¾, 3×1½	..	..	..	..	..	..	327 104	8 0 0 Multan.	2,623 K
	M. S. Angles 1½×1½×¼	..	..	..	..	..	..	166 48	8 2 0 Multan.	1,352 K
4188-3, dated 8-2-26	M. S. Angles 1½×1½×¼	..	..	..	..	..	..	201 94	9 11 0 Multan.	1,955 B
4188-4, dated 16-2-26	M. S. Tee 1½×1½×¼	..	..	..	2723 5	10 4 0 Multan.	27,911 K	..	..	..
H-28-2, dated 24-2-26	R. S. Joists 4¾×1¾	..	..	..	51 50	11 12 0 Landikotal.	605 K	..	..	..
H-28-3, dated 24-2-26	R. S. Joists 10×5, 8×4, 7×4	..	..	..	..	..	..	78 93	9 7 6 Landikotal.	746 K
H-46-1, dated 3-3-26	R. S. Beams 12×5, 12×6	648 100	8 0 0 (Order states Tata and British mixed), Howrah.	5,591	648 100	8 0 0	5,591 C	..	..	..

H-46-2, dated 3-3-26	R. S. Beams 12 × 5 and 12 × 6	150 96	8 0 0 (Order states Tata and British mixed), Howrah.	1,207	150 96	8 0 0	1,207 C	..	..	..
H-76-2, dated 16-3-26	M. S. Plates ¼" and ⅜"	..	..	..	..	..	..	160 0	9 4 6 Lahore Cantt.	1,485 K
H-76-3, dated 16-3-26	M. S. Angles 1½ × 1½ × ¼	160 0	11 12 0 Lahore Cantt.	1,880 C	..	..	..	..	..	..
	M. S. Angles 1¾ × 1¾ × ¼	..	..	..	100 0	12 8 0 Lahore Cantt.	1,250 C	..	..	..
	M. S. Tee 1½ × 1½ × ¼	..	..	..	60 0	12 0 0 Lahore Cantt.	720 C	..	..	..
	M. S. Tee 2 × 2 × ¼	..	..	..	30 0	11 12 0 Lahore Cantt.	353 C	..	..	..
	M. S. Tee 2 × 2 × ¼	70 0	11 4 0 Lahore Cantt.	788 C	..	..	..	..	..	..
H-76-4, dated 15-3-26	M. S. Angles 1½ × 1½ × ¼	..	..	..	..	..	..	240 0	9 6 0 Lahore Cantt.	2,250 K
	M. S. Rounds ¼	..	..	..	..	..	..	100 0	10 0 0 Lahore Cantt.	1,000 K
	M. S. Rounds ½	..	..	..	..	..	..	60 0	10 4 0 Lahore Cantt.	615 K
	M. S. Rounds ¾	..	..	..	..	..	..	40 0	9 10 0 Lahore Cantt.	385 K

Order No. and Date.	Particulars.	TATAS.			BRITISH.			CONTINENTAL.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.
H-76-5, dated 15-3-26 .	M. S. Plates ⅛ . . .	..	..	..	..	..	..	80 0	9 8 0 Lahore Cantt.	760 K
	M. S. Plates 1/16 . . .	..	..	..	..	..	..	20 0	10 8 0 Lahore Cantt.	210 K
	M. S. Plates 1/16 . . .	..	..	..	..	..	..	20 0	10 8 0 Lahore Cantt.	210 K
	M. S. Flats 2 × ⅛ . . .	..	..	..	..	..	..	60 0	8 8 0 Lahore Cantt.	510 K
	M. S. Flats 1¼ × ¼ . . .	..	..	..	..	..	..	20 0	9 6 0 Lahore Cantt.	188 K
	M. S. Flats 2 × ⅜ . . .	..	..	..	..	..	..	20 0	9 8 0 Lahore Cantt.	190 K
	M. S. Rounds ⅜ . . .	..	..	..	..	..	..	100 0	9 8 0 Lahore Cantt.	950 K
H-76-7, dated 15-3-26 .	M. S. Hoop 1 × 1/16 . . .	..	..	..	..	..	..	20 0	10 8 0 Lahore Cantt.	210 B
	M. S. Hoop 1½ × 1/16 . .	..	..	..	..	..	..	20 0	11 4 0 Lahore Cantt.	225 B
H-76-11, dated 16-3-26 .	M. S. Flat 1½ × ⅛ . . .	..	..	..	..	..	..	80 0	9 11 6 Lahore Cantt.	778 B

H-76-12, dated 17-3-26 .	M. S. Tee 1½×1½×¼ . .	..	..	..	..	..	..	80 0	12 0 6 Lahore Cantt.	1,238 K
H-76-13, dated 28-3-26 .	M. S. Tee 1½×1½×¼ . .	..	..	..	..	..	..	220 0	12 6 0 Lahore Cantt.	2,723 K
H-105, dated 26-3-26 .	R. S. Beams 18×6, 8×4, 6×3.	..	..	..	181 100	9 3 0 McLeodganj Road.	1,671 K	..	..	..
H-124, dated 29-3-26 .	R. S. Beams 8×4 . . .	..	..	..	..	..	..	25 84	7 0 0 Sukkur.	591 K
N-2912-1, dated 14-9-25 .	M. S. Rounds 2½″, 3″ and 3-½″ .	..	..	..	..	..	..	30 0	8 6 0 Sukkur Main.	251 K
	M. S. Flat, 1″×⅜″ and 1″×½″ .	..	..	..	..	..	..	20 0	7 14 0 Sukkur Main.	158 K
N-2657-1, dated 22-6-25 .	M. S. Sheets 6′×3″ . .	..	..	..	..	..	..	200 0	9 14 0 Kirkee.	1,975 B
N-2657-2, dated 22-6-25 .	M. S. Sheets 6′×3″. . .	2060 0	9 0 0 Howrah.	18,540 C	..	..	..	..	..	..
N-3302-1, dated 6-11-25 .	R. S. Beams 15″×5″ and 10″×5″	..	..	..	178 62	7 12 0 Karachi.	1,384 K	..	..	..
	R. S. Beams 7″×4″ . .	..	..	..	..	..	..	111 60	6 7 0 Karachi.	720 KC
	R. S. Joists 4″×1¾″ . .	..	..	..	..	..	..	189 87	7 4 0 Karachi.	1,376 KC

Order No. and Date.	Particulars.	TATAS.			BRITISH.			CONTINENTAL.		
		Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.	Weight.	Rate per cwt.	Cost.
		Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.	Cwt. lbs.	Rs. A. P.	Rs.
N-3302-2, dated 6-11-25 .	R. S. Beams 6″×3″ . .	..	..	..	..	..	..	61 80	7 2 0 Karachi.	440 KC
	R. S. Joists 4″×1¾″ . .	..	..	..	..	..	..	121 33	7 0 0 Karachi.	849 KC
	R. S. Joists 4″×1¾″ . .	..	..	..	..	..	..	473 44	6 12 0 Karachi.	3,195 KC
	R. S. Joists 3″×1½″ . .	..	..	..	..	..	..	98 92	6 10 0 Karachi.	655 KC
N-3302-3, dated 6-11-25 .	R. S. Beams 15″×5″ . .	..	..	..	..	..	..	82 56	7 8 0 Karachi.	617 KC
	R. S. Beams 12″×5″ . .	..	..	..	..	..	..	58 32	6 14 0 Karachi.	401 KC
	R. S. Beams 10″×5″ . .	..	..	..	..	..	..	91 68	6 9 0 Karachi.	601 KC
N-3302-4, dated 6-11-25 .	R. S. Beams 15″×5″ . .	..	..	..	..	..	..	412 56	7 8 0 Karachi.	3,0 94 KC
N-3302-6, dated 6-11-25	R. S. Joists 4″×1¾″	..	..	..	684 107	8 6 0 Bombay.	5,757 B	..	..	..
N-4270, dated 13-2-25	M. S. Round bars ½″ diameter	509 72	9 0 0 Khai Phemeki.	4,587 J	..	..	..	..	..	..
N-2338-2, dated 5-6-25 .	M. S. Sheet 8″×3″×$\frac{1}{16}$″ . .	..	..	..	..	..	..	27 36	9 7 0 Karachi.	258 K
	M. S. Sheet 8″×3″×$\frac{1}{16}$″ . .	..	..	..	..	..	..	13 13	8 3 0 Karachi.	107 K

D.—Statements showing the particulars of cost of protected articles (fabricated) purchased by the Indian Stores Department during 1924-25, 1925-26 and first quarter of 1926-27.

N. B.—It has not been possible to indicate prices delivered at Calcutta, Bombay or Karachi in all cases as it is impossible without a great deal of labour to recalculate the quoted prices on an F. O. R. port basis.

सत्यमेव जयते

सत्यमेव जयते

Statement showing the particulars of weight and cost of Steel Sections purchased during the period 1st April, 1926 to 30th June, 1926.

Order No. and date.	Particulars.	Tata.				British.				Continental.			
		Weight.	Rate per cwt.	F.O.R.	Cost Rs.	Weight.	Rate per cwt.	F.O.R.	Cost. Rs.	Weight.	Rate per cwt.	F O.R.	Cost. Rs.
	Sheets corrugated steel galvanized 22 Bwg.—					Cwts.	Rs. A. P.						
H-281, dated 15th May 1926.	7′, 8′ and 9′ × 32″	...	...	...	...	120	17 8 0	Kathgodam.	2,100-C	...	...	...	...
H-337-1, dated 27th May 1926.	7′ × 32″	...	...	...	...	120	17 0 0	Lahore	2,040-K	..	...	...	...
H-337-2, dated 27th May 1926.	7′ and 8′ × 32″	...	...	...	...	14	17 0 0	Do.	4,760-K	...	...	...	...
H-287-1, dated 28th May 1926.	7′ × 32″	...	...	...	...	160	17 4 0	Pathankot	2,760-K	...	...	..	...
H-287-2, dated 28th May 1926.	Sheets plain steel galvanized 24 Bg. 8′ × 3′.	...	..	...	...	40	18 3 0	Do.	728-K	...	...	...	...
	Sheets corrugated steel galvanized 24 Bg.—												
H-287-3, dated 28th May 1926.	8′ × 32″	...	...	...	...	160	16 5 6	Do.	2,615-K	...	...	...	...
4215-H-3, dated 17th April 1926.	6′, 7′ and 8′ × 32″	...	...	..	...	175 cwts. 96 lbs.	15 12 0	Quetta	2,770-K	...	...	...	...
4215-H-4, dated 17th April 1926.	10′ × 32″	...	...	...	...	51 cwts. 80 lbs.	16 7 0	Do.	850-K	...	...	...	..
4215-H-5, dated 30th April 1926.	10′ × 32″	..	...	...	...	23 cwts. 80 lbs.	16 9 0	Do.	393-K	...	..	...	...
	TOTAL	...				865 cwts. 32 lbs.	Rs. 19,016.						

NOTE.—K and C stand for Karachi and Calcutta, the places of despatch.

Summary of " Protected " articles purchased by " N " Branch during the year 1924-25, 1925-26 and April, May, June, 1926.

Serial No.	—	1924-25 Cost.	1925-26 Cost.	April, May, June, 1926 Cost.
		Rs.	Rs.	Rs.
1	Steel Work	11,88,857	6,11,215	4,514
2	G. I. Pipes	49,342	11,927	......
3	C. I. Pipes	25,573	10,049	......
4	W. I. Pipes	64,506	32,924	......
5	Fittings	6,060	......	......
6	Conveyance	52,151	59,066	5,185
7	Poles	16,139	2,39,996	......
	TOTAL .	14,02,628	9,65,177	9,699
	GRAND TOTAL .	......	23,77,504	......

Statement showing the particulars of cost of " Protected " articles purchased by the Indian Stores Department (Engineering Branch) during 1924-25 and 1925-26, and April, May and June 1926-27, i.e., *fabricated (structural) steel work, pipes and conveyance.*

Order No. and date.	Description.	Rate per cwt.	Total cost.	Make.	F. O. R.	REMARKS.
		Rs. A. P.	Rs.			
N-342, dated 22nd April 1924.	Steel work for 80 ft. long Workshop at Sukkur.	...	3,846	British . .	Howrah.	
N-426, dated 22nd May 1924.	Mobilization shedding for M. E. S. .	...	3,56,700	Tata . .	Lahore and Quetta.	
N-513, dated 30th May 1924.	Steel work for roofing of New Power House, Delhi.	...	21,612	British or Tata .	...	
N-756, dated 28th July 1924.	Portable hutting for Lloyd Barrage .	...	14,733	Kumardhubi Engineering Works.	Rohri and other places.	
N 688-1, dated 29th July 1924.	Steel work for bridge across the Weir Sulemanki.	...	2,77,624	Indian . .	Howrah.	
N-688-2, dated 29th July 1924.	Ditto ditto .	...	2,86,120	Tata or British .	Do.	
N-1184, dated 11th December 1924.	Railway Bridge for Sadqia and Fordwah Canals.	16 4 0	70,040	Do. .	Do.	
N-1551, dated 5th January 1925.	Trusses and roofing for Engine Shed Lloyd Barrage.	...	5,171 5,174	Continental .	Jauvri. Sukkur.	
N-2094, dated 11th March 1925.	Steel work for the Power House Lloyd Barrage.	...	17,228	Continental or British.	Do.	

Order No. and date.	Description.	Rate per cwt.	Total cost.	Make.	F. O. R.	REMARKS.
		Rs. A. P.	Rs.			
N-1297, dated 11th March 1925.	Steel work for the Power House, Khewra	...	1,534	Continental .	Khewra.	
N-2079, dated 27th March 1925.	Steel work for roofing of Reservoir, Multan.	13 8 0	4,313	British . .	Multan.	
N-1353, dated 18th November 1924.	Roof trusses	...	1,320	Do. . .	Delhi.	
N-1259-2, dated 29th November 1924.	Storage tank high level . . .	...	16,570	...	Sukkur.	
N-1259-1, dated 25th November 1924.	Storage with staging	...	10,665	...	Janvri.	
N-555, dated 5th May 1924	Covered tanks	...	1,865	...	Howrah.	
N-1390, dated 29th November 1924.	Tank, pressed steel, 48,000 gallons capacity with roof and staging.	...	13,000	...	Bannu.	
N-1808, dated 7th January 1925.	Tank, pressed steel, 50,000 gallons with staging.	...	12,100	...	Howrah.	
N-1731-2, dated 4th February 1925.	Tank, pressed steel, 60,000 gallons capacity with staging.	...	19,250	...	Janvri.	
N-1731-2, dated 4th February 1925.	Tanks, pressed steel, 9,600 gallons capacity with staging.	..	3,275	...	Do.	
Ditto	Tanks, pressed steel, 4,800 gallons capacity with staging.	...	2,400	...	Do.	

Ditto .	Ditto ditto .	...			1,240	...	Do.
N-2047, dated 16th February 1925.	Pigots, patent pressed steel tank, open top.	. .			3,400	England . .	Ferozepore.
N-2129, dated 2nd March 1925.	Pressed steel, tanks, with manhole and cover.	...			1,845	...	Calcutta.
N-2344-1, dated 23rd March 1925.	Pressed steel tanks, 9,600 gallons capacity.	...			1,900	...	Howrah.
N-828, dated 29th August 1924.	Steel, tank, 4′ × 4′ × 5′ . .	128	0	0	5,760	...	Bagarji.
N-977, dated 22nd October 1924.	Pressed steel, tank, 24′ × 12′ × 8′ . .	3,750	0	0	3,750	British . .	Bombay.
$\frac{\text{N-1311}}{9}$, dated 29th December 1924.	Tanks, 2′ × 2′ × 2′	36	0	0	360	Indian . .	Lahore.
Ditto .	„ $2\frac{2}{3}' \times 2\frac{2}{3}' \times 2\frac{2}{3}'$	57	0	0	570	Do. . .	Do.
N-1311-10, dated 29th December 1924.	Tank, 4′ × 4′ × 4′	149	8	0	747	Do. . .	Do.
		1925-26.					
N-2492, dated 26th May 1925.	Steel work for switchboard gallery at Lloyd Barrage.	18	8	0	1,804	Continental .	Sukkur.
N-2286, dated 4th June 1925.	Steel work for store-shed and roofing at Lloyd Barrage.	...			11,992	Do. . .	Janvri.
N-2702, dated 13th August 925.	Steel work for mule shed at Kathgodam	...			30,085	Do. . .	Kathgodam.

Order No. and date.	Description.	Rate per cwt.			Total cost.	Make.	F. O. R.	REMARKS.
		Rs.	A.	P.	Rs.			
N-2696, dated 21st August 1925.	Structural steel for field workshop, Lloyd Barrage.	...			1,445	...	Karachi.	
N-2992, dated 11th September 1925.	Steel floor troughing at Bannu . .	...			1,582	British . .	Gambila.	
N-3033, dated 3rd October 1925.	Steel work and roofing for Power House, Jaipur.	...			20,435	.	Jaipur.	
N-3451, dated 2nd December 1925.	Steel bins for pneumatic tyres . .	...			91,576	British . .	Chaklala.	
N-3713, dated 12th December 1925.	Plate girders over Sadiqia and Fordwah Canals.	14	3	0	35,328	...	Chananwala.	
N-880, dated 22nd May 1925.	Road and Rail Bridge over Islam Weir	14	4	0	1,15,270	British or Tata .	Kumardhubi.	
N-2380, dated 4th June 1925.	Steel barges for Lloyd Barrage . .	21,896 each.	0	0	1,09,480	...	Afloat on River Indus.	
Ditto .	Ditto ditto . .	22,896 each.	0	0	1,14,480	Fabricated at Home.	Do.	
N-2759, dated 9th September 1925.	Roof trusses	...			3,465	Continental .	...	

N-3182, dated 25th November 1925.	Steel work and roofing for siding shelter—				
	Columns	16 0 0	320	Indian . .	Shahjahanpur.
	Trusses	18 0 0	288	Do. . .	Do.
	Roofing	24 0 0	1,920	British .	Do.
	Do.	22 0 0	660	Do. . .	Do.
N-4523, dated 26th March 1926.	Moulding boxes	214 0 0	29,960	Continental .	Sukkur and Janvri.
N-3131, dated 7th September 1925.	Steel frame work for Sukkur . .	...	276	British . .	Karachi.
N-3243, dated 31st December 1925.	Rack, bars, 15 ft. high . . .	16 0 0	304	Country . .	Howrah.
N-3242, dated 19th October 1925.	Pressed steel tank, with staging . .	...	4,065	British . .	Kathgodam.
	PIPES, G. I.	Rate per ft.			
	Pipes, G. I.—				
N-742, dated 12th July 1924.	1"	0 5 10	182	British . .	Khewra.
Ditto .	½"	0 3 5	43	Do. . .	Do.
Ditto .	2"	0 14 0	437	Do. . .	Do.
N-745-4, dated 30th July 1924.	¾"	23 0 0 per 100 ft.	782	Do. . .	...

Order No. and date.	Description.	Rate per ft.	Total cost.	Make.	F. O. R.	REMARKS.
		Rs. A. P.	Rs.			
	Pipes, G. I.—*contd.*					
N-930-5, dated 1st October 1924.	$\frac{3}{4}''$	0 3 10	120	British . .	Harnai.	
Ditto .	$\frac{1}{2}''$	0 3 0	56	Do. . .	Do.	
Ditto .	$1\frac{1}{2}''$	0 9 10	123	Do. . .	Do.	
Ditto .	of sizes	0 3 10 0 3 0 0 9 10	175	Do. .	Do.	
N-902-2, dated 1st September 1924.	$\frac{3}{8}''$	0 2 8	167	Continental .	...	
N-1004, dated 17th September 1924.	1″	33 0 0 per 100 ft.	660	British . .	Quetta.	
N-1014-1, dated 24th September 1924.	$\frac{1}{2}''$	0 3 4	1,196	Continental .	...	
N-1014-1, dated 24th September 1924.	$\frac{3}{4}''$	0 4 0	980	Continental .	Dhampur.	
N-1014-2, dated 24th September 1924.	$\frac{1}{4}''$	0 8 6	165	British . .	Do.	
N-1180-1, dated 16th October 1924.	with joints and sockets, 2″ . .	0 12 0	3,000	Do. . .	Kuchman Road.	

N-1180-2, dated 16th October 1924.	1"	0 5 0	1,875	Do. . .	Do.
N-1179, dated 22nd October 1924.	1"	36 11 0 per 100 ft.	366	Do. . .	Jamrud.
N-1245, dated 22nd October 1924.	¾"	0 3 8	1,547	Do. . .	Nowshera.
Ditto . .	½"	0 3 2½		Do. . .	Do.
N-1281-1, dated 17th November 1924.	3"	1 4 6	3,075	Continental .	Khewra.
N-1311-1, dated 19th November 1924.	½" . . . . ¾" . . . . 1"	0 2 10 0 3 6 0 4 9	12,865	British . .	Lahore.
N-1311-4, dated 19th November 1924.	1-½"	0 6 9	2,109	Continental .	Do.
N-1311-4, dated 19th November 1924.	Bends, G. I. 90° of sizes . . .	0 3 9 0 5 2 0 6 6 0 14 4 1 6 0 3 3 0	2,074	Do. . .	Do.
Ditto . .	Elbows, G. I. ½", ¾", 1" . . .	0 3 1 0 4 6 0 5 10	656	Do. . .	Do.

Order No. and Date.	Description	Rate per ft.	Total cost.	Make.	F. O. R.	REMARKS.
		Rs. A. P.	Rs.			
	Pipes, G. I.—					
I-N343-1, dated 21st November 1924.	½″	0 2 11¼	184	British	Quetta.	
Ditto	1½″	0 8 8½	544	Do.	Do.	
N-1392-5, dated 3rd December 1924.	½″	0 8 9	109	Do.	Lahore.	
Ditto	1″	0 4 11¾	467	Do.	Do	
Ditto	¾″	0 3 8¾	117	Do.	Do.	
Ditto	½″	0 2 9½	104	Do.	Do.	
N-1395, dated 25th November 1924.	1″	0 4 4	271	Continental	D. I. Khan.	
N-1459-1, dated 18th December 1924.	½″	0 2 10	177	British	Quetta.	
N-1488, dated 4th December 1924.	2½″	1 2 9	4,248	Do.	Shahjahanpur.	
	2″	0 12 3				
N-1508-1, dated 10th December 1924.	W. I. Sockets 4″	1 14 0 each.	413	Do.	Bannu.	

	Pipes, G. I.—					
N-1096, dated 14th October 1924.	4"	2 2 11	735	Do.	Murree.	
N-1070, dated 30th September 1924.	¾"	0 3 8	458	Continental	Nowshera.	
N-1230-1, dated 29th October 1924.	¾"	22 12 0 per 100 ft.	331	British	Karachi.	
N-826-2, dated 18th August 1924.	¾"	0 3 10	839	Do.	Harnai.	
Ditto	½"	0 9 7	539	Do.	Do.	
N-571-1, dated 29th May 1924.	4"	1 15 11	1,197	Do.	Karachi.	
Ditto	3"	1 6 6	745	Do.	Do.	
Ditto	1½"	0 9 6	950	Do.	Do.	
N-2919, dated 18th March 1925.	½"	18 0 0 per 100 ft.	108	Do.	Do.	
N-1583, dated 10th December 1924.	2"	0 10 9	3,049	Do.	Do.	
N-1663-7, dated 8th January 1925.	2"	0 11 10	178	Do.	Khewra.	
N-1663-8, dated 8th January 1925.	2"	0 8 10	239	Do.	Do.	
N-2062-4, dated 9th March 1925.	¾"	21 0 0 per 100 ft.	179	Do.	Karachi.	
Ditto	¾"	28 0 0 per 100 ft.	508	Do.	Do.	

Order No. and date.	Description.	Rate per ft.			Total cost.	Make.	F. O. R.	REMARKS.
		Rs.	A.	P.	Rs.			
	Pipes, C. I. S. & S.—							
N-659-1, dated 5th July 1924.	3″ × 9′	12 per cwt.	0	0	163	Indian	Kulti.	
Ditto	6″ × 9′	12 per cwt.	0	0	386	Do.	Do.	
N-758, dated 4th August 1924.	Lapwelded steel piping 10″	7 per ft.	15	0	2,382	British	...	
N-3484, dated 14th November 1925.	Pipes, C. I. S. & S. 10″	9 per cwt.	6	0	1,534	Indian	Kulti.	
N-1053-4, dated 7th November 1924.	C. I. Pipes, S. & S.	11	7	6	3,555	British	Thana.	
N-938, dated 25th September 1924.	Do. 14″ × 12′ length	81 each.	0	0	10,125	Continental	Rawalpindi.	
Ditto	Do. 13″ × 4′ length	24	12	0	...	Do.	Do.	
N-1306, dated 11th November 1924.	C. I. S. & S. T., pieces 6″	75 each.	0	0	1,125	Indian	Dharwar.	
N-1752,-1, dated 4th February 1925.	C. I. S. & S. Branch pieces 6″ to 1″	14	0	0	...	Do.	Sukkur.	

N-1752-10, dated 9th February 1925.	C. I. S. & S. Pipes 6″	10 0 0 – p.	6,303	British . .	Lahore Cantt.
N-23 19-1, dated 18th March 1925.	C. I. Tees, sockets, bends, pipes and crosses of sizes.	12, 13 and 13 8 0	...	Indian . .	Kumardhubi.
N-2459, dated 12th May 1925.	Pipes C. I. 1½″	0 8 9 per ft.	1,641	British . .	Quetta.
Ditto . .	Ditto ½″	0 2 11 per ft.	182	Do. . . .	Do.
N-3101-2, dated 5th September 1925.	G. I. Bends 8″	0 12 0 per cwt.	259	Indian . .	Kulti.
N-3124, dated 30th September 1925.	Pipes, G. I. 3″	1 1 11 per ft,	2,240	British . .	Sukkur.
N-3235-2, dated 1st October 1925.	Pipes, G. I. 2″	68 8 0 per 100 ft.	685	Do. . .	Quetta.
N-2319-3, dated 3rd April 1925.	Ditto 3″	1 3 6 per feet.	1,097	Do. . .	Karachi.
Ditto . .	Ditto 2″	0 10 6 per feet.	485	Do. . .	Do.
N-2347, dated 1st April 1925.	Ditto 1½″	0 6 6 per feet.	96	Continental .	Do.
Ditto . .	Ditto 1″	22 12 0 per 100 feet.	910	Do. .	Do.
N-2422, dated 1st May 1925.	Ditto 1″	0 3 7 per ft.	336	Do. .	Do.
N-2445-1, dated 14th May 1925.	Ditto 2″	50 0 0 per 100 ft.	326	Do. .	Do.

Order No. and date.	Description.	Rate.	Total cost.	Make.	F. O. R.	REMARKS.
		Rs. A. P.	Rs.			
N-2445-2, dated 14th May 1925.	Pipes, G. I. 1½″	41 0 0 per 100 ft.	164	Continental	Karachi.	
N-2586, dated 24th June 1925.	Ditto 1½″	50 0 0 per 100 ft.	400	Do.	Do.	
N-2724, dated 7th July 1925.	Ditto 1¼″	0 6 1 per ft.	267	Do.	Julundur.	
N-4226-1, dated 9th February 1926.	Ditto 1¼″	0 9 9 per ft.	914	British	Sukkur.	
N-4226-2, dated 9th February 1926.	Ditto 1¼″	0 15 0 per ft.	1,781	Do.	Do.	
N-697, dated 7th July 1924.	Barrows wheel 3 cft. capacity	36 0 0 each.	432	Do.	Khewra.	
N-755, dated 12th January 1925.	Coaches for 4′ 8½″ gauge track	15,050 0 0 each.	45,150	Indian	Sealdah.	
N-831, dated 6th August 1924.	Cylindrical Municipal Night soil carts 100 gallons capacity.	425 0 0 each.	1,275	Do.	Bombay.	
N-919, dated 27th August 1924.	Ditto ditto.	222 0 0 each.	222	Do.	Ballari Cantt.	
N-1044, dated 29th September 1924.	Barrows wheel	28 0 0 each.	840	Do.	Havelian.	

N-1116, dated 10th October 1924.	Ditto	29 0 0 each.	116	Do.	Risalpur.
N-3(63-3, dated 24th September 1925.	Ditto	51 12 0 each.	794	British	Quetta.
N-1521, dated 29th November 1924.	General purpose convertable boggie 24" gauge.	172 0 0 each.	...	..	Karachi.
N-1776, dated 3rd February 1925.	Material trolly, 5 6" gauge	340 0 0 each.	1,360	British	Sukkur and Janvri.
N-1791-13, dated 10th February 1925.	Wheel Barrows	29 0 0 each.	348	Indian	Sukkur.
Ditto	Sack barrels	49 8 0 each.	198	Do.	Do.
N-1791-13, dated 10th February 1925.	Luggage Barrows	169 0 0 each.	676	Do.	Do.
N-1998, dated 5th February 1925.	Steel Wheel Barrows	25 0 0 each.	100	Do.	Do.
N-2205, dated 12th March 1925.	Ransome Hand tip carts	80 0 0 each.	640	Do.	Karachi.
N-2396-1, dated 18th April 1925.	Double bogie timber wagons	450 0 0 each.	1,800	Hudsons	Calcutta.
N-2816-1, dated 20th August 19:5.	Underframe complete with wheels, etc.	115 0 0 set.	460	Do.	Mehrabpur.
N-2816-2, dated 24th August 1925.	Steel double side tip wagons, 2 ft. gauge	145 0 0 each.	5,875	Hudsons England	Mehrabpur Janvri.
N-3188-4, dated 25th September 1925.	Platform wagons	172 0 0 each.	1,376	Hudsons	Karachi.

Order No. and date.	Description.	Rate.	Total cost.	Make.	F. O. R.	REMARKS.
		Rs. A. P.	Rs.			
N-3381-1, dated 4th November 1925.	Steel double side tip wagons 2 ft. gauge	150 0 0 each.	3,750	Hudsons England . .	Janvri.	
N-3381-2, dated 11th November 1925.	Flat platform wagon 2 ft. gauge .	250 0 0 each.	2,500	Do. . .	Sukkur.	
Ditto . .	Ditto ditto .	248 0 0 each.	2,480	Do. . .	Janvri.	
N-3619, dated 25th November 1925.	Double side tip wagons 24 inch gauge .	131 0 0 each.	1,310	Holland . .	Turki.	
N-3922, dated 18th January 1926.	Double side tip trucks 2 ft. gauge .	125 8 0 each.	20,080	... .	Kargi.	
N-4144, dated 8th February 1926.	Side tip wagons 1′ gauge . . .	130 0 0 each.	3,250	...	Nizamuddin.	
N-4421, dated 4th March 1926.	Hudson patent double sided steel tip wagons 2′ gauge, with lever brake.	197 0 0 each.	394	England . .	Bagarji.	
Ditto .	Hudson patent double sided steel tip wagons 2′ gauge, without lever brake.	162 0 0 each.	2,916	Do. . .	Do.	
Ditto .	Standard underframe complete with wheels, etc.	95 0 0 each.	1,900	Do. . .	Do.	
N-2369-1, dated 18th April 1925.	Double boggie timber wagon .	450 0 0 each.	1,800	Indian . .	Calcutta	

N-4460, dated 16th March 1926.	Flat platform standard trailer 4 tons .	3,075 0 0 each.	9,175	British . .	Bombay and Karachi.
N-1125, dated 24th October 1924.	5″ × 30′ bates expanded steel poles .	109 0 0 each.	7,739	Continental .	Dalowali.
N-783, dated 5th August 1924.	Ditto	120 0 0 each.	8,400	Do. .	Sialkot.
N-2770-1, dated 10th July 1925.	Mannesman Tubular seamless steel poles	71 8 0 each.	4,648	German . .	Dalowali.
N-2471-11, dated 10th July 1925.	Mannesman Tubular seamless steel poles of various sizes.	193 0 0 each.	1,351	British . .	Sukkur.
Ditto .	Ditto	123 0 0 each.	1,722	Do. . .	Sukkur and Janvri.
Ditto .	Ditto	107 0 0 each.	8,025	Do. . .	Do.
Ditto .	Ditto	85 0 0 each.	5,100	Do. . .	Do.
Ditto .	Ditto	63 0 0 each.	7,245	Do. .	Do.
Ditto .	Ditto	136 0 0 each.	3,264	Do. . .	Do.
N-3126, dated 25th November 1925.	British Mannesman Weldless Tubular poles of various sizes.	101 4 0 each.	24,300	Do. . .	Jaipur.
Ditto .	Ditto	158 8 0 each.	1,902	Do. . .	Do.
Ditto .	Ditto	84 10 0 each.	21,156	Do. . .	Do.

Order No. and date.	Description.	Rate.	Total cost.	Make.	F. O. R.	REMARKS.
N-3126, dated 25th November 1925.	British Mannesman Weldless Tubular poles of various sizes.	Rs. A. P. 78 2 0 each.	Rs. 7,813	British . .	Jaipur.	
N-3126-2, dated 22nd December 1925.	Ditto	78 2 0 each.	7,813	Do. . .	Do.	
N-3809-4, dated 31st December 1925.	Solid drawn steel tubular poles . .	65 0 0 each.	2,535	German . .	Saharaupur.	
N-4444-4, dated 19th February 1926.	British Mannesman weldless steel tubular poles.	101 0 0 each.	6,060	British . .	Roorkee.	
N-4444-5, dated 27th February 1926.	Solid drawn weldless steel tubular poles.	45 8 0 each.	22,750	German . .	Do.	
N-2142, dated 17th April 1925.	Hot rolled weldless victaulic jointed steel tubes.	3 14 0 per ft.	1,14,312	British .	Jamrud.	
N-3046, dated 9th November 1925.	M. S. Tank 1,450 gallons capacity .	515 0 0 each.	4,120	Do. . .	Delhi.	
N-3061, dated 18th September 1925.	Pressed steel roofed tank, 9,600 gallons capacity.	3,980 0 0 each.	15,920	Country .	Lahore.	
N-3260, dated 22nd September 1925.	Water tank 450 gallons capacity . .	120 0 0 each.	1,440	Do. . .	Karachi.	
N-3026, dated 30th September 1925.	Pressed steel tank, 20,000 gallons capacity.	2,132 0 0 each.	2,132	Do. . .	...	
N-4527, dated 8th May 1926.	Tank for petrol storage, 5,000 gallons capacity.	1,550 0 0 each.	1,550	Do. . .	Karachi.	

N-3908, dated 15th January 1926.	Pressed steel tank 20,000 gallons capacity, with staging.	...	4,796	British .	Rawalpindi.
N-3212, dated 19th October 1925.	Pressed steel tank 15,000 gallons capacity, with staging.	...	4,065	...	Kathgodam.
N-4160-2, dated 9th February 1926.	Pressed steel tank 8,000 gallons capacity, with staging.	...	2,457	British . .	Bannu.
	C. I. Pipes—				
N-2459-5, dated 17th June 1925.	5″	9 6 0 per cwt.	186	Indian . .	Kulti.
N-3128, dated 22nd September 1925.	12″	9 6 0 per cwt.	927	Do. . .	Do.
N-3101-1, dated 5th September 1925.	S. & S. 8″	9 6 0 per cwt.	3,663	Do. . .	Do.
N-3352-1, dated 30th September 1925.	Ditto	9 6 0 per cwt.	313	Do. . .	Do.
N-3520, dated 23rd October 1925.	C. I. flanges and tail pieces . . .	13 3 0 per cwt.	222	Do. . .	Kumardhubi.
N-1752-15, dated 4th April 1925.	C. I., S. & S. Bends 90° 6″ . . .	12 0 0 per cwt.	240	Do. . .	Karachi.
N-1752-16, dated 12th May 1925.	C. I., S. & S. branch pieces of sizes .	20 0 0 per cwt.	800	Do. . .	Do.
N-2319-2, dated 3rd April 1925.	C. I. flange pipe 6″ dia. . . .	3 4 7 per ft.	657	Do. .	Kulti.
Ditto . . .	C. I., S. & S. pipe 4″	1 11 0 per ft.	2,489	Do. . .	Do.

Order No. and date.	Description.	Rate.	Total cost.	Make.	F. O. R.	REMARKS.
		Rs. A. P.	Rs.			
N-940-1, dated 10th September 1924.	Flexible metallic piping, 7 inch	15 5 6 per ft.	552	British	Bombay	
N-940-1, dated 10th September 1924.	Flanges	29 9 0 each.	355	Do.	Do.	
Ditto	Flexible metallic piping, 10" dia.	27 5 0 per ft.	983	Do.	Do.	
Ditto	Flanges	46 12 0 each.	561	Do	Do.	
N-1139-1, dated 10th October 1924.	Elbows ¾"	0 9 0 each.	206	Do.	Nowshera.	
	" ½"	0 7 6 each.				
	Sockets, reducing G. I.—					
N-1311-1, dated 19th November 1924.	½" × ¾"	0 2 11 per ft.	417	Do.	Lahore.	
	1" × ¾"	0 3 9 per ft.				
Ditto	Pipes, steam of sizes	0 3 10 0 5 3 per ft.	284	Do.	Do.	
N-1311-3, dated 19th November 1924.	Sockets, galvanized iron of sizes	0 1 7 0 2 0 0 2 3	365	Do.	Do.	

N-1508-3, dated 11th December 1924.	W. I. reducing tees, 4″ × 1½″ . .	10 8 0 each.	683	Do. . .	Bannū.
N-1580, dated 17th December 1924.	Sockets, G. I. 4″	1 14 9 each.	192	Do. . .	Lahore.
	W. I. piping screwed and socketted—				
N-975-1, dated 17th September 1924.	4″ dia.	1 10 3 per ft.	246	Do. .	Bikaner.
Ditto . . .	3″ dia.	1 3 3 per ft.	1,203	Do. . .	Do.
Ditto . . .	Galvd. 3″	1 7 7 per ft.	8,251	Do. . .	Do.
Ditto . . .	,, 1½″	0 10 0 per ft.	938	Do. . .	Do.
N-1209, dated 12th November 1924.	(Black) 3½″	1 5 8 per ft.	13,541	Do. . .	Lyallpur.
Ditto . . .	4″	1 8 0 per ft.	7,500	Do. . .	Do.
N-37-4, dated 26th June 1924.	5″	1 13 0 per ft.	2,719	Do. . .	Bombay.
N-37-5, dated 26th June 1924.	5″	2 0 6 per ft.	914	Do. . .	Do.
N-37-6, dated 26th June 1924.	5″	1 14 0 per ft.	1,500	Do. . .	Do.
	W. I. pipes—				
N-809, dated 21st August 1924.	3″	1 5 3 per ft.	3,984	Continental .	Mehrabpur.

Order No. and date.	Description.	Rate.	Total cost.	Make.	F. O. R.	REMARKS.
	W. I. Pipes—*contd*	Rs. A P.	Rs.			
N-808, dated 21st August 1924.	3″	1 5 6 per ft.	4,031	Continental .	Rohri.	
N-1752-2, dated 4th February 1925.	2½″	1 0 9 per ft.	1,047	British . .	Sukkur.	
	G. W. I. pipes –					
N-1752-2, dated 4th February 1925.	1″	0 4 6 per ft.	2,813	Do . .	Do.	
Ditto . . .	½″	0 3 5 per ft.	1,922	Do. .	Do.	
N-1752-3, dated 4th February 1925.	¾″	0 3 4 per ft.	208	Do. . .	Do.	
N-1752-4, dated 4th February 1925.	Reducing tees galvd. 1″ to 4″ . .	13 0 0 each.	260	Do. . .	Do.	
	Bends ½″	0 6 9 each.	106			
	„ 2″	1 6 3 each.	153			
	„ 2½″	3 12 0 each.	188			
	„ 3″	5 4 0 each.	210			

Ditto	„ 4"	10 0 0 each.	400	Do	Do.
	„ 6"	56 0 0 each.	336		
	Sockets 3"	1 6 6 each.	141		
	„ 4"	2 4 0 each.	225		
N-1752-12, dated 16th February 1925.	G. W. I. pipes— 2"	0 11 3 per ft.	2,665	Do.	Do.
Ditto	2"	0 8 6 per ft.	1,972	Continental	Do.
N-1752-13, dated 9th March 1925.	6"	3 2 0 per ft.	605	British	Karachi.
N-2273-1, dated 28th March 1925.	W. I. pipes, 3"	1 2 6 per ft.	6,938	Continental	Do.
N-2011-1, dated 23rd February 1925.	Pipes, W. I. galvanized	0 4 6 per ft. 0 6 6 per ft.	2,083	Do.	Do.
N-774, dated 21st July 1924.	Sliding gates	650 0 0 each.	650	Indian	...

Order No. and date.	Description.	Rate.	Total cost.	Make.	F. O. R.	REMARKS.
		Rs. A. P.	Rs.			
N-1000, dated 6th September 1924.	Sliding gates	670 0 0 each.	1,340	Indian . .	Bannu.	
N-1114, dated 15th September 1924.	Steel girders	16 0 0 per cwt.	18,336	Do. . .	Delhi.	
N-3171-1, dated 13th October 1925.	W. I. Pipes— 3″ and 2″	0 12 0 per ft.	6,336	British . .	Calcutta.	
N-3523-1, dated 22nd December 1925.	4″	1 9 0 each.	781	Do. . .	Bagarji.	
N-3523-2, dated 22nd December 1925.	(Black) 4″	1 3 9 per ft.	1,111	Continental .	Do.	
Ditto .	(Galvanized) . . .	1 14 3 per ft.	189	British . .	Do.	
N-3646-3, dated 9th December 1925.	3″	1 7 3 per ft.	3,488	Continental .	Naundero.	
N-3646-4, dated 9th December 1925.	3″	1 2 6 per ft.	4,163	British . .	Calcutta.	

ted 9th December 25.	Pipes, W. I. Galvanized 3″ . . .	1 4 9 per ft.	3,631	Do. . .	Ruk.
3650-3, dated 9th December 1925.	Ditto	1 7 3 per ft.	6,450	Continental	Do.
N-2273-2, dated 21st April 1925.	Ditto with flanged ends, 3″ .	1 1 6 per ft.	4,375	Do. . .	Karachi.
N-3292, dated 20th November 1925.	Lapwelded steel tubes, 5″ . . .	3 0 0 per ft.	2,400	British . .	Do.
N-2319-6, dated 15th April 1925.	G. I. Pipes ¾″	0 3 4 per ft.	104	Do. . .	Do.
N-3368, dated 19th November 1925.	C. I. Pillars with gates, 9′ × 4′ . .	80 0 0 each.	2,080	British or Tata .	Sukkur.
N-3599, dated 20th November 1925.	Lapwelded steel pipes, 8″ . . .	9 0 0 per ft.	1,300	Indian .	Cawnpore.
N-4515, dated 28th May 1926.	Spans, 23′ 6″	12 12 5 per cwt.	4,514	British . .	Duniapore.
N-4514, dated 1[illegible]th April 1926.	Double boggie platform wagon, 10 ton capacity, 2 ft. gauge.	1,650 0 0 each.	3,300	Indian . .	Begmanji and Mehrabpur.
Ditto . .	Single platform wagon, 2 ton capacity, 2 ft. gauge.	145 0 0 each.	1,885	Do. . .	Do.

Summary of "Protected" Articles purchased during 1924-25 and 1925-26.

Serial No.	Articles.	Continental.				British.				Country.				Total weight.	Total cost.
		1924-25.		1925-26.		1924-25.		1925-26.		1924-25.		1925-26.			
		Weight.	Cost.	Weight.	Cost.	Weight.	Cost.	Weight.	Cost.	Weight.	Cost.	Weight.	Cost.		
1	Nails	188 cwts.	5,247	22 cwts.	303	...	...	...	...	45 cwts.	659	...	...	255 cwts.	Rs. 6,209
2	Wire	822 cwts.	13,605	1,068 cwts. 1 qr. 21 lbs.	15,571	528 cwts.	8,720	200 cwts.	2,831	...	...	2,000 s.ft.	437	2,618 cwts. 1 qr. 21 lbs. 2,000 s.ft.	40,727 437
3	Railway track	1929·65 tons.	327,805	1083·41 tons.	177,748	...	...	...	...	...	...	...	...	3,013 tons.	5,05,553
4	Rails	...	...	...	...	...	...	...	...	...	...	489 tons. 5 cwts. 27 lbs.	56,768	489 tons 5 cwts. 27 lbs.	56,768
5	Fish Plates	700 Nos.	613	990 Nos.	1,163	...	...	...	...	...	...	400 Nos.	130	2090 Nos.	1,906
6	Spikes	...	...	21 tons 2 cwts.	9,841	70 cwts.	1,008	...	...	1,311 cwts.	18,682	...	...	90 tons 3 cwts.	29,531
7	Switches	44 Nos.	3,188	...	...	...	...	...	...	131 Nos.	18,686	209 Nos.	30,602	384 Nos.	52,476
	ed sheets	...	...	...	...	...	...	18,000 sheets.	3,780	...	...	...	...	18,000 sheets.	3,780

Statement showing the particulars of cost of 'Protected' articles purchased by the Indian Stores Department (Hardware Branch) during 1924-25 and 1925-26.

(1) NAILS, WIRE.

Order No. and date.	Description of Stores.	Weight.	Rate per Cwt.	F. O. R.	Country.	IMPORTED. British.	IMPORTED. Conti-nental.
		1924-25.	Rs. A. P.		Rs.	Rs.	Rs.
665, dated 30th June 1924.	Nails, Wire, Iron, 2″	17 cwts.	14 8 0	Tatanagar	247	...	...
	Ditto 2½″	8 „	14 0 0	Ditto	112	...	...
881, dated 9th August 1924	Ditto 2½″	20 „	15 0 0	Ditto	300	...	...
1755-1, dated 11th March 1925.	Ditto 2″ and 2½″	180 „	22 15 0	Ghazipur	...	...	4,129 K.
745-1, dated 31st July 1924.	Ditto 2″ and 2½″	8 „	14 12 0	Karachi	...	...	118
		233 cwts.			659	...	5,247
						Total	5,906
		1925-26.					
2737-5, dated 10th July 1925.	Nails Wire, Iron, 5″	22 cwts.	13 12 0	Bannu	...	...	303 K.
		255 cwts.				Total	303
					GRAND TOTAL		6,209

NOTE.—K stands for Karachi, the place of despatch.

(2) WIRE.

1924-25

Order No. and date.	Description of Stores.	Weight.	Rate per Cwt.	F. O. R.	Country.	IMPORTED.	
						British.	Continental.
			Rs. A. P.		Rs.	Rs.	Rs.
283-2, dated 14th April 1924.	Wire Iron Galvanized plain 8 Gauge	50 cwts	21 0 0	Bombay.		...	1,050
499, dated 2nd May 1924.	Wire Iron Galvanized plain annealed 8 Gauge.	100 ,,	17 8 0	Howrah	...	1,750	...
511, dated 20th May 1924.	Wire Annealed Galvanized steel 16 Gauge.	40 ,,	19 8 0	C. I. F. Rangoon.	...	...	780 C
	Ditto 18 Gauge	20 ,,	19 8 0	Do.	...	...	390 C
	Ditto Ditto	20 ,,	21 0 0	Do.	...	...	420 C
568, dated 17th May 1924.	Wire Iron Galvanized plain 8 Gauge	50 ,,	18 4 0	Howrah	...	...	913
915-1, dated 29th August 1924.	Wire Iron, No. 8.	5 ,,	19 0 0	Kohat.	...	...	95 K
916, dated 30th August 1924.	Wire Iron Galvanized, No. 6.	5 ,,	21 0 0	Bannu	...	105 K	...

	Wire Iron Galvanized, No. 8	5 „	19 0 0	Do. . .	...	...	95 K
931, dated 27th August 1924.	Wire Galvanized iron No. 8 .	90 „	18 0 0	Havelian .	...	...	1,620 B
1039-3, dated 26th September 1924.	Wire No. 18 iron, baling annealed .	8 „	18 14 0	Secunderabad .	...	...	151 B
1042-1, dated 13th October 1924.	Wire Steel annealed, No. 16 . .	15 „	16 0 0	Risalpore .	...	..	240 B
1194, dated 1st October 1924.	Wire Galvanized Iron 8 gauge .	20 „	19 0 0	Kohat . .	...	...	380 K
1363, dated 21st November 1924.	Wire Soft iron, No. 16 . .	12 „	15 8 0	Multan . .	...	186 K	...
1365-1, dated 28th November 1924.	Wire Galvanized Iron No. 10 . .	60 „	17 12 0	Lahore . .	...	1,065 K	...
1365-4, dated 28th November 1924.	Wire Galvanized Iron No. 8 .	40 „	16 10 0	Do. .	...	...	665 K
1663-8, dated 8th January 1925.	Wire Galvanized Iron 6 SWG .	20 „	16 12 0	Khewra .	...	335 K	...
	Ditto Ditto .	10 „	16 12 0	Do. . .	...	168 K	...
1710-1, dated 15th January 1925.	Wire Galvanized Iron 4 Ditto .	7 „	14 15 5	Sukkur	...	...	105 K
1780, dated 26th January 1925.	Wire Galvanized Iron plain, No. 8 .	60 „	16 11 0	Havelian .	...	...	1,001 K
1792, dated 14th January 1925.	Ditto Ditto . .	60 „	16 0 0	Hassanabdal .	...	...	960 B
1872, dated 30th January 1925.	Ditto Ditto . .	170 „	16 14 0	Dargai . .	...	2,869 K	...

NOTE.—B, C, and K stand for Bombay, Calcutta and Karachi respectively, the places of despatch.

(2) WIRE—*contd.*

1924-25—*contd.*

Order No. and date.	Description of Stores.	Weight.	Rate per Cwt.	F. O. R.	Country.	Imported.	
						British.	Continental.
			Rs. A. P.		Rs.	Rs.	Rs.
2011-2, dated 11th March 1925.	Wire G. I., 18 and 16 SWG	21 cwts	16 14 0	Bombay	...	354	...
	„ „ 12 and 10 „	80 „	13 12 0	Do.	...	1,100	...
	„ „ 6 and 4 „	50 „	15 12 0	Do.	...	788	...
2023-1, dated 25th February 1925.	„ „ No. 14	20 „	15 8 0	Karachi.	...	...	310
	„ „ No. 10	100 „	15 0 0	Do.	...	...	1,500
2093, dated 16th February 1925.	„ „ No. 8	78 „	13 12 0	Do.	...	...	1,073
2253, dated 10th March 1925.	„ „ plain No. 8	34 „	13 7 0	Do.	...	...	457
2257-18, dated 17th March 1925.	„ „ No 8	54 „	14 0 0	Do.	...	...	756
2257-19, dated 17th March 1925.	„ „ „	46 „	14 0 0	Do.	...	...	644
		1,350 „				8,720	13,605
						Total	22,325

1925-26.

2863-2, dated 3rd August 1925.	Wire Plain, G. I., No. 8 . .	100 cwts.	15 7 0	Havelian .	...	...	1,514 K
2909, dated 20th August 1925.	„ „ „ „ annealed.	100 „	14 5 0	Do. .	...	1,431 K	...
2961, dated 24th August 1925.	„ „ „ „ „ .	13 „	12 7 0	Karachi .	...	...	162
3604, dated 25th November 1925.	„ „ „ „ „ .	13 „	13 7 0	Deolali . .	...	...	175 B
4036-1, dated 9th January 1926.	„ G. I., Wove, 24″ wide . .	2,000 s.ft.	0 3 6 s.ft.	Bakhshankhan	437 (made from British material).	...	...
H-76-5, dated 15th March 1926.	„ „ annealed, Nos. 8 and 10	140 „	13 12 0	Lahore . .	...	...	1,925 K
	„ „ „ No. 16 .	6½ „	16 8 0	Do. . .	...	...	107 K
H-76-8, dated 15th March 1926.	„ „ „ „ SWG	53½ „	15 0 0	Howrah .	...	...	803
2338-2, dated 5th June 1925.	„ „ gauge, 8, 3′ × 22 G. .	21 rolls	26 4 0 roll	Karachi .	...	...	551
	„ „ „ 10, 3′ × 22 G. .	4 „	27 4 0 „	Do. .	...	...	109
4444-3, dated 19th February 1926.	„ „ No. 10 . . .	33 cwts. 1 qr.	467 0 0 lot	Roorkee .	...	...	467 C
4387-H-1, dated 31st March 1926.	„ „ „ 8 . . .	100 cwts.	15 9 0	Serai Alamgir .	...	...	1,556 K
4387-2-H, dated 28th May 1926.	„ „ „ . . .	100 „	10 4 6	Howrah .	...	...	1,025

(2) WIRE—*concld.*

Order No. and date.	Description of Stores.	Weight.	Rate per cwt.	F. O. R.	Country.	IMPORTED.	
						British.	Continental.
1925-26—*contd.*							
			Rs. A. P.		Rs.	Rs.	Rs.
2389-1, dated 15th April 1925.	Annealed baling wire, 12 gauge	100 cwts.	12 8 0	Karachi	...	...	1,250
2389-2, dated 17th April 1925.	Ditto ditto	100 „	12 12 0	Bombay	...	...	1,275
2389-3, dated 7th May 1925.	Ditto ditto	240 „	15 0 0	Calcutta	...	...	3,600
2389-4, dated 11th May 1925.	Ditto ditto	60 „	14 0 0	Do.	...	...	840
2631, dated 11th June 1925.	G. I. wire, plain, No. 8	100 „	14 0 0	Karachi	...	1,400	...
2746-4, dated 24th September 1925.	Wire, binding, steel, annealed, 16 gauge.	9 „ 21 lbs.	19 12 0	Khewra	...	...	182 K
		1,268 cwts., 1 qr. 21 lbs.	...		437	2,631	15,571
				TOTAL Rs.	18,839		
	Weight 2,618 cwts., 1 qr. and 21 lbs., 1924-26.			GRAND TOTAL	41,164		

NOTE.—K, C and B stand for Karachi, Calcutta and Bombay respectively, the places of despatch.

(3) STEEL RAILWAY TRACK.

Order No. and date.	Description of Stores.	Weight.	Rate per track mile.	F. O. R.	Country.	IMPORTED.	
						British.	Continental.
			Rs.		Rs.	Rs.	Rs.
		1924-25.					
N-536, dated 27th May 1924.	2′ gauge light railway track rails complete with fish plates, bolts, clips, bolts and clips steel sleepers 33″ long.	2 track miles (82·68 tons.)	6,500	Karachi	...	...	13,000
	Ditto but with corrugated steel sleepers 39″ long 5″ wide.	13 track miles (537·42 tons.)	6,800	Do.		...	88,400
N-582, dated 2nd June 1924.	2′ gauge light railway track rails 20 lbs. per yard complete as above 18,′ 21′, 23′ long.	2 track miles (82·68 tons.)	7,680	Bombay	...	...	15,360
N-1015, dated 17th October 1924.	35 lb. rail track complete with fish plates, bolts and nuts, dogspikes (10,000).	3/4 track mile (44·25 tons.)	7,900	Calcutta	...	...	5,925
N-1997, dated 27th February 1925.	2′ gauge light railway track 20 lb. complete with sleepers, fishplates, bolts and nuts, clips and clips bolts and nuts.	5 track miles (206·7 tons.)	7,250	Bagarji	...	...	36,250K
N-703—2, dated 26th July 1924.	2′ gauge light railway track 20 lb. complete with fishplates, etc.	5 track miles (206·7 tons.)	7,300	Karachi	...	...	36,500
N-703—1, dated 22nd July 1924.	Ditto.	17 track miles (702·78 tons.)	6,900	Do.	...	...	1,17,300
...	2′ gauge light railway track 16 lb. complete with fishplates, etc.	1 track mile (34·44 tons.)	5,550	Do.	...	...	5,550
N-760, dated 4th August 1924.	Rails F. F. 30 lb. complete with fishplates, bolts and nuts dogspikes but without sleepers.	6,800 R.ft. of rails (32 tons).	140 per 100 R.ft.	Khewra	...	...	9,520C
		1929·65 tons.					3,27,805

(3) STEEL RAILWAY TRACK—*contd.*

Order No. and date.	Description of Stores.	Weight.	Rate per tract mile.	F. O. R.	Country.	IMPROVED.	
						British.	Continental.
			Rs.		Rs.	Rs.	Rs.
		1925-26.					
N-3108—1, dated 23rd October 1925.	2′ gauge light railway track 20 lb. complete with fishplates, etc.	4 track miles (165·36 tons.)	6,800	Mehrabpur	...	...	27,200K
H-284, dated 21st May 1925.	Ditto.	1 track mile (41·34 tons.)	7,175	Naundero .	...	...	7,175K
H-413. dated 19th June 1926.	Ditto.	3 track miles (31 tons.)	7,180	Begmanji .	...	...	5,385K
3385-1, dated 23rd October 1925.	Ditto .	1¼ track mile (51·67 tons).	7,200	Janvri . .	...	...	9,000C
3385-2, dated 23rd October 1925.	Ditto .	1 track mile (41·34 tons).	6,950	Do. . .	...	...	6,950K
2553, dated 26th June 1925.	Ditto .	2 track miles (124 tons).	6,925	Ruk . .	...	...	20,775K

	Ditto	2 track miles (82·68 tons).	6,900	Bagarji	...	...	13,800K
2583-I, dated 16th December 1925.	Ditto	1¾ track miles (72·34 tons).	7,550	Naundero	...	..	13,213K
	Ditto	2½ track miles (93 tons).	6,250	Do.	..	...	14,063K
3649-1, dated 16th December 1925.	Ditto	2 track miles (82·68 tons).	7,700	Ruk	...	...	15,400C
	Ditto	3 tract miles (124 tons).	6,350	Do.	...	...	19,050C
3922-2, dated 4th February 1926.	Ditto	3 tract miles (124 tons).	5,190	Karghi	...	..	15,570 J and C Rails & fish-plates supplied of Tata's make.
3753-H, dated 19th February 1926.	2′ gauge light railway track 30 lbs. with dog-spikes.	4460′ track 820′ ,, (50 tons).	10,750 7,000	Khewra Howrah	. ...	... ...	9,080C 1,087
		1083·41					1,77,748
	Weight=	3,013 tons.			GRAND TOTAL		5,05,553

Note.—C, K and J stand for Calcutta, Karachi and Jamshedpur respectively, the places of despatch.

(4) RAILS.

Order No. and date.	Description of Stores.	Weight.	Rate.	F. O. R.	Country.	IMPORTED. British.	IMPORTED. Continental.
		1925-26.	Rs.		Rs.	Rs.	Rs.
2653, dated 9th July 1925	Rails 41¼ lb.	498 R. ft. 30¼ tons.	125 per ton .	Kohat . .	3,812 Tata's make		
H.-280, dated 1st May 1926	,, 41¼ and 50 lb. 2nd class rails .	450 tons . .	110 ,, ,, .	Pathankot .	51,700 Tata's make	J.	
2768, dated 9th July 1925	,, 90 lb.	12 Nos. 115 Cwts. and 80 lbs.	140 ,, ,, .	Oderolal .	810 Tata's make		
4229-H., dated 25th February 1926.	,, 50 lb. rails 40′ long . .	12 Nos. 59 Cwts. and 59 lbs.	44-10-3 each .	Bombay .	446 Tata's make		
		489 Tons, 5 Cwts. and 27 lbs.		Total .	Rs. 56,768		

NOTE.—J stands for Jamshedpur, the place of despatch.

(5) FISHPLATES.

Order No. and date.	Description of Stores.	Quantity.	Rate.	F. O. R.	Country.	IMPORTED.	
						British.	Conti-nental.
			Rs. A. P.		Rs.	Rs.	Rs.
		1924-25.					
1170, dated 3rd January 1925.	Fishplates 41½ lb. rails . .	700	0 14 0 each.	Quetta . .	...	...	613C.
		1925-26.					
2193-3, dated 4th May 1925.	„ 75-lb. rails . . .	990	224 0 0 per ton.	Karachi .	...	...	1,163
2623-4, dated 26th August 1925.	„ 41¼-lb. „ . . .	200 pairs	160 0 0 per ton.	Tatanagar .	130	...	...
		2,090 Nos.			130	...	1,776
					2,090 Nos. GRAND TOTAL .		1,906

NOTE.—C stands for Calcutta, the place of despatch.

(6) DOG AND CHAIR SPIKES.

Order No. and date.	Description of Stores.	Weight.	Rate per cwt.	F. O. R.	Country.	Imported.	
						British.	Continental.
		1924-25.	Rs. a. p.		Rs.	Rs.	Rs.
73-2, dated 6th June 1924.	Dogspikes for 75 lbs. track	131 Cwts.	16 8 0	Howrah	2,162	...	..
73, dated 1st September 1924.	Chairspikes $\frac{3}{4}''$ diameter	135'00 Nos. 1,180 Cwts.	14 0 0	Do.	16,520	...	...
572-2, dated 29th December 1924.	Dogspikes 25 lbs. track	70 Cwts.	14 6 6	Bahawalnagar	...	1,008 K	...
		69 Tons, 1 Cwt.			18,682	1,008	
					Total	19,690	
		1925-26.					
		Tons Cwts.					
3403-1, dated 11th November 1925.	Dogspikes $5\frac{1}{2}'' \times \frac{5}{8}''$	9 16	17 10 0	Sukkur	...	3,455	...
3403-2, dated 9th November 1925.	,, $5'' \times \frac{5}{8}''$	11 6	13 3 0	Howrah	...	6,386	...
		21 2			Total	9,841	
		Weight 90 Tons, 3 Cwts.		GRAND TOTAL		29,531	

NOTE.—K and C stand for Karachi and Calcutta, respectively, the places of despatch.

(7) SWITCHES.

Order No. and date.	Description of Stores.	Quantity.	Rate.	F. O. R.	Country.	IMPORTED.	
						British.	Continental.
		1924-25.					
			Rs.		Rs.	Rs.	Rs.
536-1, dated 4th June 1924.	Points and crossings, 2′ gauge 100′ radius rails 20 lbs. complete with switch boxes and connections.	20 sets	145 per set	Calcutta	...	...	2,900
564, dated 26th July 1924	Points and crossings, 2′ gauge self-contained 36′ radius 14 lbs. rail do. complete with kickover points.	2 Nos.	72 each	Howrah	...	...	144
564, dated 30th June 1924	Ditto, ditto	2 „	72 „	Do.		...	144
721-2, dated 30th June 1924.	Points and crossings, 2′ gauge 42′ radius 18 lbs. complete with sleepers, switch lever boxes and connection.	2 sets	120 per set	Do.	240		
721-1, dated 4th July 1924.	Points and crossings, 2′ gauge 37′ radius 20 lbs. complete with sleepers, switch lever boxes and connection.	4 „	129 „	Calcutta	516		
1170, dated 3rd January 1925.	Points and crossings, for 2′ gauge tram lines.	3 „	530 „	Quetta	1,590 C		
1572-1, dated 29th December 1924.	Points and crossings, 2′ gauge 50′ radius for 25 lbs. track.	11 Nos.	186 each	Bahawalnagar	2,046		
	Points and crossings, double centre of track 7′ 6″ radius 37′ kickover type.	2 sets	343 per set	Do.	686		
	Points and crossings, 10, centre of track 37′ kickover type.	6 „	363 „	Do.	2,178		
	Diamond crossing 40 degree	1 No.	175 each	Do.	175		
	Three way turnouts with suitable levers.	3 Nos.	330 „	Do.	990		

(7) SWITCHES—*contd.*

Order No. and date.	Description of Stores.	Quantity.	Rate.	F. O. R.	Country.	IMPORTED.	
						British.	Continental.
		1924-25—*contd.*					
			Rs.		Rs.	Rs.	Rs.
1078-1, dated 10th October 1924.	Points and crossings, 2′ gauge 50′ radius for 20 lbs. do.	24 sets . .	160 per set .	Sukkur .	3,840		
703-3, dated 6th August 1924.	Switches for 20 lbs. track complete with switch lever boxes, etc., 100′ radius 23′ long.	3 „ . .	175 „ .	Rohri . .	525		
	Ditto . . .	3 „ . .	175 „ .	Mehrabpur .	528		
	Ditto . . .	16 „ . .	175 „ .	Bagarji .	2,800		
	Three way	1 No. . .	275 each .	Rohri . .	275	C	
	Ditto	1 „ . .	277 „ .	Mehrabpur .	277		
	Ditto	1 „ . .	275 „ .	Bagarji .	275		
	Turnouts, symmetrical, 100′ radius for 20 lbs. track.	1 „ . .	155 „ .	Do. .	155		
1170, dated 3rd January 1925.	Switches complete with switch lever boxes and connecting rods for 2′ gauge tram line.	3 sets . .	530 per set .	...	1,590		
		175			18,696*		3,188
						TOTAL .	21,874

3381, dated 4th November 1925.	Points and crossings, 2′ gauge 50′ radius for 20 lbs. track.	18 sets 18 „	165 set 163 „	Sukkur Janvri	2,970 2,934	K	
3381-2, dated 11th November 1925.	Ditto ditto	8 „ 8 „	165 „ 163 „	Sukkur Janvri	1,320 1,304	C	
2853, dated 24th September 1925.	Crossings 60 lbs. complete with fittings—						
	1 in. 10 for 5′—6″ gauge	5 Nos.	245 each	Calcutta	1,225		
	1 in. 8½ Do.	32 „	215 „	Do.	6,880		
	1 in. 7½ Do.	2 „	205 „	Do.	410		
	1 in. 7 Do.	2 „	200 „	Do.	400		
	1 in. 6 Do.	2 „	185 „	Do.	370		
	Points 60 lbs. for 5′—6″ gauge complete with lever boxes, lever connecting rods and fittings.	31 sets	325 set	Do.	10,075	C	
	3 throw switches for 5′—6″ gauge complete point and stock rails lever boxes and fitting.	2 „	415 „	Do.	830	C	
922-4, dated 4th February 1926.	Crossings 20 lbs. rails 100′ radius complete with switch lever boxes and rods mounted on steel sleepers.	12 Nos.	157 each	Kargi	1,884		
		209 Nos.			30,602		
			384 Nos.	GRAND TOTAL.	52,476		

NOTE.—K and C stand for Karachi and Calcutta, respectively, the places of despatch.

*Fabricated in India. It is not known whether rails from which the switches were made were imported or of Messrs. Tata's make.

(8) TINNED SHEETS.

Order No. and date.	Description of Stores.	Quantity.	Rate.	F. O. R.	Country.	IMPORTED.	
						British.	Continental.
			Rs.			Rs.	Rs.
H-41, dated **12th April 1926.**	Charcoal process tinned sheets 20″ × 14″ × ·0123″ thick and **weighing 113 lbs. per box** of 112 **sheets.**	18,000 sheets	21 per 100 sheets.	Howrah	...	3,780	...

NOTE.—C stands for Calcutta which indicates place of despatch.

Summary showing the total quantity and cost of Galvanized, Corrugated and Plain Sheets, purchased during 1924-25 and 1925-26.

—	Weight.			Cost.
	1924-25.			
	Tons.	Cwts.	lbs.	Rs.
British	125	10	54	42,963
Continental	14	6	84	4,810
Total .	139	17	26	47,773
	1925-26.			
British	504	5	75	1,76,076
GRAND TOTAL .	644 (644 tons approx.)	2	101	2,23,849

सत्यमेव जयते

Statement showing the particulars of cost of "Protected" articles purchased by the Indian Stores Department during 1924-25 and 1925-26.

(9) GALVANIZED, CORRUGATED SHEETS AND PLAIN SHEETS.

Order No. and date.	Description of Stores.	Weight.	Rate per cwt.			F. O. R.	Country.	British.	Continental.
			Rs.	A.	P.		Rs.	Rs.	Rs.
			1924-25.						
N-439-10, dated 16th April 1924.	Corrugated sheets, galvanized iron	23 cwts.	17	8	0	Howrah	...	403	...
N-671-1, dated 28th June 1924.	Ditto	180 ,,	16	8	0	Calcutta	...	...	2,970
N-671-2, dated 28th June 1924.	Ditto	100 ,,	17	0	0	Bombay	..	...	1,700
N-706, dated 27th June 1924.	Ditto	129½ ,,	16	8	0	Calcutta	...	2,137	...
N-706-2, dated 10th July 1924.	Ditto	7 tons and 14 cwts.	17	8	0	Bombay	...	2,695	...
Ditto.	Ditto	8 tons and 14 cwts.	17	8	0	Do.	...	3,045	...
N-734, dated 30th June 1924.	Ditto	33 cwts., 3 qr. and 20 lbs.	17	7	9	Karachi	...	593	...
N-877-2, dated 15th September 1924.	Ditto	12 cwts.	19	14	0	Dalowali	...	238	...

N-930-2, dated 1st October 1924.	Ditto	29 cwts. and 102 lbs.	18 8 0	Harnai		553	...
N-929-2, dated 6th September 1924.	Ditto	131⅜ cwts.	18 8 0	Quetta		2,430	...
	Ditto	45 cwts.	18 2 0	„	...	816	...
N-964-1, dated 16th October 1924.	Ditto	19 cwts. and 90 lbs.	19 8 0	Peshawar	...	386	...
N-1137-1, dated 20th October 1924.	Ditto	42 cwts.	9 0 0	Dera Ismail Khan.	...	798	...
N-1084-1, dated 3rd October 1924.	Ditto	27 cwts. and 78 lbs.	18 8 0	Jamrud	...	512	...
N-1083, dated 3rd Oc o-bsr 1924.	Ditto	8¾ cwt	19 8 0	...	...	171	...
N-1216, dated 6th October 1924.	Ditto	9¼ „	19 14 0	Havelian	...	184	...
N-1498, dated 6th December 1924.	Ditto	38¾ „	22 0 0 approximately	...	...	853	...
N-1547, dated 11th December 1924.	Ditto	20 cwts. and 191 lbs.	19 8 0	Bannu	...	393	...
N-1558-1, dated 19th December 1924.	Ditto	28 cwts.	18 14 0	Khewra	...	529	...
	Ditto	6 „	18 14 0	„	...	113	...
N-1676, dated 18th December 1924.	Ditto	20 cwts. 2 qr.	16 6 0	Karachi	...	336	...
N-1688-1, dated 7th January 1925.	Ditto	41 cwts.	16 14 0	Lundo	...	692	...

(9) GALVANIZED CORRUGATED SHEETS AND PLAIN SHEETS—*contd.*

Order No. and date.	Description of Stores.	Weight.	Rate per cwt.	F. O. R.	Country.	British.	Continental.
			Rs. AS. P.		Rs.	Rs.	Rs.
		1924-25—***contd.***					
N-1688-2, dated 7th January 1925.	Corrugated sheets, galvanized iron	11 cwts. and 72 lbs.	17 4 9	Lundo .	...	213	...
N-1688-4, dated 10th January 1925.	Ditto . .	9 cwts. 3 qr. .	16 15 0	Daur .	...	165	...
N-1688-5, dated 10th January 1925.	Ditto . . .	29 cwts. and 390 lbs.	16 14 0	Bandhi .	...	349	...
N-1688-6, dated 10th January 1925.	Ditto . . .	184 Nos.	17 2 0	...	...	1,097	...
N-1759-2. dated 26th January 1925.	Ditto . . .	68 cwts. and 90 lbs.	16 14 0	Tando .	...	1,161	...
		7 cwts. and 48 lbs.	17 4 0	Jam .	...	128	...
		68 cwts. and 90 lbs.	16 6 0	Karachi .	...	1,127	...
		7 cwts and 48 lbs.	16 12 0	Do. .	...	125	...

N-1821, dated 29th January 1925.	Corrugated sheets, galvanized iron	2	37	15	14	0	Karachi .	...	38	...
......	Ditto . . .	18	40	8	4	0	Do. .	...	151	...
N-2102, dated 20th February 1925.	Ditto . . .	315	0	15	11	0	Do. .	...	4,942	...
N-2106, dated 27th February 1925.	Ditto . . .	42	38	15	11	0	..	.	664	...
N-2135, dated 3rd March 1925.	Ditto . . .	60	1	15	10	0	...	.	938	...
N-2157, dated 16th March 1925.	Ditto . . .	208	32	15	12	0	...	...	3,281	...
N-2252—2, dated 20th March 1925.	Ditto . . .	10	5	16	2	0	...	...	162	...
N-2262, dated 24th March 1925.	Ditto . . .	26	92	16	8	0	Karachi .	...	443	...
	Ditto . . .	9	26	16	12	0	Do.	.	155	...
N-2279, dated 20th March 1925.	Ditto . . .	83	42	16	2	0	Do. .	...	1,344	...
......	Ditto . . .	128	94	16	8	0	Do. .	...	2,126	...
......	Ditto . . .	1	96	16	12	0	Do. .	...	31	...
N-687, dated 28th June 1924.	Plain sheets, galvanized iron .	6¾ Approximately		21	0	0	..	...	142	...

(9) GALVANIZED CORRUGATED SHEETS AND PLAIN SHEETS—*contd.*

Order No. and date.	Description of Stores.	Weight.		Rate per Cwt.			F. O. R.	Country.	British.	Continental.
		1924-25—*contd.*								
		Cwts.	lbs.	Rs.	A.	P.		Rs.	Rs.	Rs.
N-857—1, dated 18th August 1924.	Plain sheets, galvanized iron	8 approximately		17	8	0	Bombay	...	...	140
N-903—6, dated 1st September 1924.	Ditto	7¾	...	21	15	0	...	...	170	...
N-1365—1, dated 28th November 1924.	Ditto	56	...	18	12	0	Lahore Cantt.	...	1,050	...
N-1365—2, dated 28th November 1924.	Ditto	58	...	20	5	0	Do.	...	1,178	...
......	Ditto	94½	...	18	14	6	Do.	...	1,786	...
......	Ditto	41 approximately		18	14	6	Do.	...	775	...
N-1365—3, dated 28th November 1924.	Ditto	8¾	...	18	11	0	Do.	...	164	...
N-1395—2, dated 25th November 1924.	Ditto	11	93	19	4	0	Kohat	..	224	...
......	Ditto	10	39	19	4	0	Do.	...	197	...

......	Ditto . . .	7	86	21	4	0	Do. .	...	185	...
N-1617—1, dated 12th December 1924.	Ditto . . .	10	...	17	14	0	Quetta .	...	179	...
N-2264, dated 18th March 1925.	Ditto . . .	10	...	17	8	0	Karachi .	...	175	...
N-2310, dated 23rd March 1925.	Ditto . . .	10	...	17	8	0	Do. .	...	175	...
......	Ditto . . .	5	...	15	4	0	Do. .	...	76	...
1925-26.										
N-2293—1, dated 15th April 1925.	Corrugated sheets, galvanized iron	106	103	16	0	0	Karachi .	...	1,711	...
N-2293—2, dated 15th April 1925.	Ditto . . .	77	11	16	0	0	Do. . .	...	1,234	...
N-2358—1, dated 18th April 1925.	Ditto . . .	7	...	16	10	0	Calcutta .	...	116	...
N-2358—2, dated 18th April 1925.	Ditto . . .	19	56	17	8	0	Do. . .	...	522	...
	Ditto . . .	9	84	18	8	8				
N-241 , dated 29th April 1925.	Ditto . . .	2	64	15	12	0	Karachi .	...	1,397	...
	Ditto . . .	70	77	15	6	0				
	Ditto . .	17	15	15	12	0				
N-2435—1, dated 29th April 1925.	Ditto . . .	43	24	16	0	0	Do. . .	...	771	...
N-2447—1, dated 14th May 1925.	Ditto . . .	27	26	15	0	0	Do. . .	...	404	...

(9) GALVANIZED CORRUGATED SHEETS AND PLAIN SHEETS—*continued.*

Order No. and date.	Description of Stores.	Weight.		Rate per Cwt.			F. O. R.	Country.	British.	Continental.
		1925-26—*contd.*								
		Cwts.	lbs.	Rs.	A.	P.		Rs.	Rs.	Rs.
N-2563, dated 28th May 1925.	Corrugated sheets, galvanized iron	50	...	14	15	0	Karachi	...	747	...
N-2677—4, dated 26th June 1925.	Ditto	40	...	17	10	0	Rawalpindi	...	705	...
	Ditto	30	...	18	2	6	Do.	...	545	...
N-2691—4, dated 23rd June 1926.	Ditto	30	...	20	0	0	Out Agency, Murree.	...	1,800	...
	Ditto	30	...	20	0	0	Do.	...		
	Ditto	30	...	20	0	0	Do.	...		
	Ditto	80	...	20	2	0	Do.	..	1,610	...
N-2709—4, dated 2nd July 1925.	Ditto	244	4	16	0	0	...	...	3,902	...
N-2724—5, dated 7th July 1925.	Ditto	8	...	17	11	0	Dalowali	...	142	...
N-2725, dated 18th July 1925.	Ditto	273	24	17	11	9	Karachi	...	4,845	...
N-2737—4, dated 11th July 1925.	Ditto	3,278	64	17	13	9	...	...	58,468	...

N-2737—4, dated 11th July 1925.	Ditto . . .	3,961	68	17	9	10	Bannu . .	...	69,782	...
N-2671—1, dated 23rd June 1925.	Ditto . . .	26	88	18	0	0	Karachi .	...	482	...
N-2724—12, dated 9th July 1925.	Ditto . . .	10	39	20	8	0	Jullundhar .	...	212	...
N-3363, dated 15th October 1925.	Plain sheets, galvanized iron .	75	...	17	7	10	Nowshera .	...	1,324	...
N-3766—1, dated 14th December 1925.	Ditto . . .	150	...	17	15	0	Havelian .	...	2,681	...
N-3063—1, 16th September 1925.	Corrugated sheets, galvanized iron	172	111	16	8	0	Quetta . .	...	2,854	...
N-3389—1, dated 20th October 1925.	Ditto . . .	15	...	17	2	7	Jamrud .	...	260	...
N-3692—1, dated 3rd December 1925.	Ditto . . .	10 tons		15	15	3	Rohri . .	...	3,190	...
N-3692—1, dated 3rd December 1925.	Ditto . . .	5 „		15	10	3	Mehrabpur .	...	1,564	...
		Cwts	lbs.							
N-3766—2, dated 14th December 1925.	Ditto . . .	858	113	17	3	10	Havelian .	...	14,808	...
									2,19,039	4,810

629 tons, 16 cwts. 17 lbs (British)
14 „ 6 „ 84 „ (Continental).

Total . 644 tons, 2 cwts. 101 lbs.

(4) *Letter No. 712, dated the 2nd September 1926, from the Secretary, Tariff Board, to the Chief Controller of Stores, Simla.*

While giving evidence before the Tariff Board you handed in a statement giving details of the purchases of steel materials made through your department during the year 1925-26. One of the items under the heading "Structural steel" relates to the purchase of single girders for which the order was placed through the Director General, Indian Stores Department, London. The details of this purchase are:—

Girders, single 94½′ long—1,290 tons £15-3-6 f.o.b. price Rs. 337-8-3 f.o.r. Bombay including Customs duty and all other charges under rule 8. Date of contract 9th December 1925. Total value f.o.r. Bombay Rs. 4,35,395-2-6.

2. The Controller of Purchase, Calcutta, has informed the Board that for the purposes of this contract the sterling price should be converted at 1*s*. 6*d*. to the rupee.

Consequently—

	Rs.	A.	P.
F.o.r. Bombay price is	337	8	3
Customs duty is	67	8	0
C.i.f. cost and landing charges	270	0	0
F.o.b. British port price	202	5	4
And freight, insurance and landing charges are equal to	67	10	0
or £5-1-5.			

I am directed to say that this appears to be a high rate for such charges and that the Board would be greatly obliged if you would kindly supply it with the detailed figures for the freight charges, etc. If essential the freight rate could be treated as confidential.

सत्यमेव जयते

(5) *Letter No. K.-3805, dated the 7th September 1926, from the Chief Controller of Stores.*

With reference to your letter No. 712, dated the 2nd September 1926, I have the honour to say that the statement referred to by you relates to purchases effected by the Director General, Indian Stores Department, London, and not to purchases made through this department.

2. The details of charges leviable under Rule 8 of the "Rules for the supply of articles for the public service" on the item referred to by you are as follows:—

(*a*) Sea freight at £4-10-0 per ton;

An extract from the sea freight schedule received from the Director General, Indian Stores Department, London, is enclosed. Under the orders of the Government of India this is to be treated as *confidential*.

(*b*) Freight brokerage at 6*d*. per ton;

(*c*) Interest at £0-18-4 per £100 on £15-3-6 works out to £0-2-9.

(*d*) Insurance at £0-4-0 per £100 on £15-3-6 works out to £0-0-7.

(*e*) **Landing, wharfage and port charges as well as the cost of carriage** to Railway station at the Bombay port at approximately Rs. 5-2-0 per ton;

(*f*) Customs duty at 25 per cent. *ad valorem*.

Enclosure.

Cost per ton f.o.r. Bombay of single girders 94 ft. 6 ins. centres of bearings complete with bearings, holding down bolts, tons, if obtained through the **Director General, Indian Stores Department, London.**

Reference to Home price. Copy No. E.-5145—S.-7758, dated 9th December 1925.

Weight (nett)

	£	s.	d.
(1) Home price f.o.r. British port	15	3	6
(2) Cost of packing, if any	...		
(3) Sea freight at £4-10-0 per ton $\frac{\text{by weight}}{\text{by measurement}}$ for one ton	4	10	0
(4) Freight brokerage at 6*d.* per ton	0	0	6
(5) Interest at £0-18-4 per £100 on £15-3-6 .	0	2	9
(6) Insurance at £0-4-0 per £100 on £15-3-6 .	0	0	7
(7) Cost in sterling	19	17	4
	Rs.	A.	P.
(8) Cost in Indian currency converted at 18*d.* per rupee the rate of exchange prescribed by the Government of India	264	14	3
(9) Landing, wharfage and port charges as well as cost of carriage to railway station (*i*) at the Bombay port at Rs. per ton approximately for one ton	5	2	0
	270	0	3
(10) Customs duty at 25 per cent. *ad valorem* .	67	8	0
(11) Cost of one ton f.o.r. Bombay	337	8	3

THE INDIAN STORES DEPARTMENT.

B.—ORAL.

Evidence of Messrs. J. S. PITKEATHLY, C.I.E., and A. V. HUMBY, recorded at Calcutta on Thursday the 15th July 1926.

Introductory.

President.—Are you the Chief Controller of Stores?

Mr. Pitkeathly.—Yes.

President.—On the last occasion, I think, we went into the general question of the organisation of the Stores Department and various other things which are, in the present enquiry, not altogether relevant. This time we shall confine our attention more or less to steel and steel products and partly to engineering. We don't wish to deal with textiles and various other activities of the Stores Department that are not directly connected with our enquiry. I take it that your Department has two functions chiefly. The first is that of inspection and the second that of effecting purchases on behalf of Government Departments. Is that right?

Mr. Pitkeathly.—Yes.

Inspection.

President.—We will take the question of inspection first. What are your arrangements as regards the inspection of steel?

Mr. Pitkeathly.—We have a branch of our Inspection Organisation at Jamshedpur called the Metallurgical Inspectorate. The Officer in charge of this Branch is the Metallurgical Inspector and he is responsible for the inspection of all steel material manufactured by Messrs. Tatas which is required to comply with standard specifications. In addition to that, we have in various parts of the country officers as Controllers of Inspection, Assistant Controllers of Inspection and Inspectors. They deal with the inspection of steel which may be obtained from other sources than Tatas. They are also responsible for the inspection of fabricated material such as wagons, bridges and other steel structures such as roof trusses, etc., etc. Here is a pamphlet (handed in) showing the Organisation and Functions of the Stores Department both as regards purchases and inspection up to January, 1926. I shall send you 7 more copies later.

President.—We will take each item separately. We will first of all deal with rolled steel. As regards Tata's rolled steel, your Metallurgical Inspector at Jamshedpur does the inspection.

Mr. Pitkeathly.—Yes, in all cases in which the material has to comply with a specification.

President.—That is to say, he inspects the material, first of all, on behalf of Government when Government buys it.

Mr. Pitkeathly.—Quite so.

President.—Then he also inspects, I understand, and certifies the material bought by others.

Mr. Pitkeathly.—He inspects and certifies the material bought by others when their material is required to comply with a particular specification. Tata's sell a certain amount of uncertified material—that is not seen by our Metallurgical Inspector. When any material is bought against a definite specification, it is inspected by the Metallurgical Inspector.

President.—Is it subjected to both physical and chemical tests?

Mr. Pitkeathly.—Yes.

Mr. Mather.—That depends on the specification, does it not?

Mr. Pitkeathly.—Yes.

President.—It may be either or it may be both?

Mr. Pitkeathly.—Yes.

President.—Does he inspect the work during the process of manufacture?

Mr. Pitkeathly.—He inspects and carries out tests during the various stages of manufacture. He also inspects when they finish it. I may say that unless specially asked for he does not test over 6″ gauge.

President.—As regards railway material, I take it that he will have to test in every case?

Mr. Pitkeathly.—Yes, because the specifications for railway materials are stringent and lay down the tests and inspections required. He works entirely according to specifications.

President.—Yesterday we had a case given—we shall have to enquire into it, I do not know whether you know anything about it—which occurred I think last year. The Angus Engineering Works contracted to make some screw couplings for the Peninsular Locomotive Works and they found that Tata's steel was very defective and they say they lost a lot of money over it.

Mr. Pitkeathly.—I am sorry I did not know that this question would be put to me; otherwise I should have had the Metallurgical Inspector down to explain the position. I understand that you are going to Jamshedpur and you might examine the Metallurgical Inspector. But you might examine Mr. Humby who is the Controller of Inspection as he is the officer responsible for the inspection of finished articles in this case.

President.—Please explain to me at what stage you came in.

Mr. Humby.—I came in during the stage of fabrication of the raw material.

President.—Were you asked to carry out this test?

Mr. Humby.—Yes, on the finished article.

President.—What was the result of the test?

Mr. Humby.—It did not get to the length of being completely fabricated because the works' own test showed the material to be bad.

President.—That was the Angus Engineering Works' test. What was the result of your test?

Mr. Humby.—I had 'check' samples taken which I sent to the Metallurgical Inspector at Jamshedpur. He re-tested and found that the material was defective but in a manner which he could not detect at the source of supply.

Mr. Mather.—When the inspection was carried out by the Metallurgical Inspector?

Mr. Humby.—Yes, he could not detect that the material was faulty.

Mr. Mather.—When merely following the specification?

Mr. Humby.—Yes. There was mechanical fault and not chemical fault.

President.—Is he not supposed to apply the mechanical test?

Mr. Pitkeathly.—He cannot on every case. In the case of inspection of large quantities of steel, it is physically impossible to test every single piece of steel. He can only test a percentage of the whole and probably the fault did not appear in the pieces that the Metallurgical Inspector tested.

President.—I think perhaps it may be better, if you are going to Jamshedpur, as I understand that you are going, to ask your Metallurgical Inspector what he has got to say about it and then if you could send us a note, it would be useful. I don't think that we shall examine him as a witness. In case he has got anything to explain, it would be better if it came from you.

Mr. Pitkeathly.—As I have already stated, I do not know the details of this case but I understand that originally Tatas were asked to tender for this material against a specification put up by the Angus Engineering

Works and under certain conditions as regards test and inspection by the Angus Engineering Company, after delivery of the material at their works. Tatas were unable to agree to supply the material under these conditions but undertook to make the material subject to inspection by the Metallurgical Inspector. Tatas did their best in this particular case when not working against any definite specification.

President.—We shall have to ask the Tata Iron and Steel Company about this because it is a very important point. When an engineer says he wants a particular kind of steel Tatas cannot very well say that they will not be able to give it when the manufacture of an article depends upon his being able to obtain the steel locally.

Mr. Pitkeathly.—I am not in possession of all the facts and I suggest that I should examine this case in consultation with the Metallurgical Inspector and send you a report.

President.—That would suit us very well. It is but fair that you should know what he has got to say about this, and I think you may as well ask Tatas as to what they have to say. If you send a combined report from the Metallurgical Inspector and Tatas it would be very useful.

As regards the general quality of the rolled steel, have you received any complaints officially from either the railways or other departments using Tatas steel?

Mr. Pitkeathly.—We have had complaints from time to time. These complaints sometimes have been justified and sometimes not. These complaints would not normally come to me direct but would go to the Metallurgical Inspector. The total number of complaints I am not in a position to give you to-day because as I have said they do not all come to me direct, but as far as I can recollect the number of complaints received by the Metallurgical Inspector has been very small.

President.—The question of rails is a very important one. The Madras and Southern Mahratta Railway, for instance, have given a few cases of defective rails. First of all we want to know whether any complaint was received by your department in connection with these defective rails.

Mr. Pitkeathly.—I cannot answer this question without a reference to the Metallurgical Inspector. I shall take up this case and will let you have a report about it.

President.—Most of these breakages are in stock rails, so that they may not necessarily be due to any defect in the steel itself, but they may be due to bad cutting or bad manipulation. Is that not quite possible?

Mr. Pitkeathly.—I should think it very likely.

President.—In cutting the rails they might mishandle them?

Mr. Pitkeathly.—Yes, they might damage the rails in many ways in cutting to size and bending to shape.

President.—There are two instances given by them where 60 lbs. flat foot steel rails cracked between bottom flange and web. They do not say what the crack was due to. Only recently we have heard definite complaints against Tatas rails. We did not hear anything definite before. But this is only one railway. Is it your opinion that even if these breakages were due to any flaw in the material, it is not abnormal?

Mr. Pitkeathly.—I should like to examine each case on its merits before expressing any definite opinion on that.

President.—Besides rails, is there any other kind of rolled steel that you have to test at Jamshedpur?

Mr. Pitkeathly.—He inspects all the sections and materials that are bought against specifications.

President.—Generally speaking, I think we may assume where any railway material is concerned, you would be required to test it?

Mr. Pitkeathly.—That is so.

Wagons.

President.—We will now take up wagons. I take it you are in touch with all the wagon building works in India?

Mr. Pitkeathly.—Yes, as regards the inspection of wagon at all stages of manufacture and the manufacturing capacity of the works.

President.—We will take them one after another. Let us take Burn and Company. Have you recently visited their works?

Mr. Pitkeathly.—I have not seen the works since my return from leave. But Mr. Humby here is in close touch with them.

President.—Mr. Humby, how long have you been in charge of this works?

Mr. Humby.—Since January 1925.

President.—At that time what was the capacity of the works? We will talk in terms of four-wheelers.

Mr. Humby.—I have not the figures by me.

President.—What I want in each case is a sort of history of the development of the works in terms of number of wagons that they can turn out.

Mr. Humby.—I cannot tell you off-hand.

President.—The figures should be based on what your experience has shown to be a safe capacity to assume.

Mr. Humby.—I will let you have that.

President.—On page 234 of the Volume containing the applications received from the Tata Iron and Steel Company, Limited, and others in connection with the Statutory Enquiry they say "The Indian Standard Wagon Company Limited can now build 2,500 wagons per year, and we intend to lay down special high capacity wagon building machines to enable us to bring an output up to 3,000 wagons per year." They say that they now build 1,000 wagons *plus* 250 underframes. I should like to know your opinion as to the capacity. You will find similar opinions expressed in the other representations and we want your opinion on each of them. Of the four works, would it be right to say that on the whole the Indian Standard Wagon Company is the best equipped?

Mr. Humby.—In some respects, yes.

President.—The Indian Standard Wagon Company are only building wagons and they are the most recent. On the other hand, Messrs. Burn and Company have longer experience. You have got to weigh the two things.

Mr. Pitkeathly.—My own opinion after having examined these works about a year ago is this. *Take Jessops.* This firm can build a good wagon, but from a point of view of modern wagon building appliances, the wagon building works of the firm are not well equipped and at the present time they are moving their wagon works from Garden Reach to Dum Dum. I consider that Messrs. Jessops' existing wagon building workshop does not compare favourably with those of the other wagon building concerns.

Burn and Company's wagon works is really a development of workshop partly put up for the purpose of wagon building and partly for general engineering, such as bridge work and steel structures. On the other hand, much of the equipment in their wagon works is up to date and modern and they are constantly making further improvements by installing new and up to date machines, tools and appliances.

The Peninsular Locomotive Company started with the idea of building locomotives and their machinery and plant was intended for that purpose. They have now adapted their works for building wagons. Some of their equipment is not entirely suited to wagon building but they are using it to the best possible advantage. They have also installed additional plant and equipment which is entirely suitable for wagon building. I consider they are generally on a *par* with Burns as far as workshop equipment is concerned.

and notwithstanding their difficulties as regards a supply of skilled labour is the best of all the wagon building works in India.

President.—Do you consider their plant reasonably modern?

Mr. Pitkeathly.—Yes. There are certain defective points in the lay out to which one can take exception. But that is a matter of opinion and applies to other works as well and I think, on the whole, they can be considered reasonably modern.

President.—You think they can be favourably compared with works at home?

Mr. Pitkeathly.—Yes. On the whole, I consider their equipment is as good as some of the wagon building works in England.

President.—The position is rather peculiar as regards these wagons. Up to now we have not thought it necessary to go into the question of their costs because we recommended that they should get a bounty and the principle of bounties is rather different from that of protection by means of duties. Now they claim that it would be better for them if, instead of bounties, protection was given by means of a duty. It then becomes necessary for us to go into the question of costs. For that reason I want to make sure whether we can say that the Indian Standard Wagon Company are specializing in building wagons and they have got fairly modern equipment; they don't do anything else, and therefore in any question of the allocation of cost between one department and another it would be safer for us to scrutinize their costs and see whether they are reasonable or unreasonable as the case may be. Do you think it would be safe for us to take that?

Mr. Pitkeathly.—Yes, I consider that as the Indian Standard Wagon Works specialize entirely in the manufacture of wagons and their works were laid out for the manufacture of wagons in the first instance, and are reasonably well equipped, an examination of the cost of manufacture in their works could be done with greater accuracy and facility than in the other wagon building works here.

President.—Now as regards the workmanship and quality, the quality will depend more or less on the materials, but the workmanship depends much on them. I want to know whether the wagons constructed in this country compare favourably with the imported wagons.

Mr. Pitkeathly.—My own opinion is that the wagons built in this country compare very favourably indeed with the imported wagons. Mr. Humby will probably be able to give some further information on the question as he has seen wagon works in England and in this country.

President.—Mr. Humby, have you been connected with wagon building?

Mr. Humby.—Yes, with the inspection of wagon building.

President.—What are the principal works you have seen?

Mr. Humby.—Leeds Forge (Newlay and Arnlay Works) and Cammell Laird's.

Mr. Mather.—Have you seen Cammell Laird's new works in Nottingham?

Mr. Humby.—Yes.

President.—What is your opinion as regards the finished wagon?

Mr. Humby.—The workmanship compares very favourably with the home production.

Mr. Pitkeathly.—The whole standard of manufacture compares very favourably.

Mr. Mather.—You presumably insist of course on very similar standard of finish and workmanship.

Mr. Humby.—We endeavour to obtain a similar standard and we get it.

President.—What is your procedure in passing a wagon? First of all, you are told that certain works have got orders for wagons by the railways.

Mr. Humby.—Yes.

President.—Then you make it your business to go to the works and inspect them during the process of manufacture.

Mr. Humby.—I have local inspectors stationed in the works constantly, assisted by an examiner. They go round the works every day. They do nothing but examine these wagons and their component parts and they pass them from stage to stage until the wagon is completed and then finally inspected. I go round myself to these Calcutta works two or three times a week and once a month to the outlying works such as the Peninsular Locomotive Company.

President.—Do you give a certificate?

Mr. Humby.—Yes.

Mr. Pitkeathly.—Might I supplement that? In the case of the material made by the Tata Company, the material is inspected and passed by our Metallurgical Inspector. The Controller of Inspection accepts the material without question as having been inspected and passed by him. In the case of the material which is imported and not made by Tatas, we have a system by which the firm gives us a statement showing the materials they propose to import. We send the statement to our Consulting Engineers at home. They pass and certify the material on our behalf. They send the material out marked and their certificates relating to the material are sent to the Inspecting Officer here who accepts it as passed material.

President.—Is that done by the Director-General of Stores?

Mr. Humby.—Yes.

President.—Does he inspect the material that has to be used in wagons?

Mr. Humby.—Yes, on our behalf.

President.—That is accepted as correct.

Mr. Pitkeathly.—Yes. The object of having that inspection in England is that three or four years ago the wagon building firms were put to a great deal of loss and expense owing to the fact that certain materials which had been inspected and sent out here by private testing and inspecting organisations of their own were re-tested by us and rejected. Apart from the cost of replacing the material, the whole wagon building programme was very badly delayed. To get over this difficulty, we introduced this system of having the materials inspected in the country of manufacture by an official organisation.

President.—So far as the Railway Board is concerned, practically after giving the order, it hands over the thing to you?

Mr. Pitkeathly.—It hands over the inspection of that order and we act as the agents of the railway in the matter of inspection.

President.—After the wagon has been running on the line, have there been any complaints about the workmanship?

Mr. Humby.—Nothing to speak of.

Mr. Mather.—Since you took charge?

Mr. Humby.—Yes.

President.—There is a clause in the Steel Industry (Protection) Act that these people must use Indian material and carry on a substantial part of the manufacture in the country. Who reports on that and who determines that?

Mr. Humby.—I report on that.

President.—Who is the Director of Inspection?

Mr. Pitkeathly.—The officer at the Head Quarters of the department who controls and supervises the work of the inspection branch of the department.

President.—We don't intend to go into details. We would like to know about what percentage of the material would come under these two categories wholly manufactured in India or partly manufactured in India.

Mr. Humby.—I cannot answer the question off-hand. I can give you figures for that.

President.—These wagon builders supply these details for your purposes. I suppose you find out whether the thing is wholly manufactured in India or not.

Mr. Humby.—That is under my inspection. I know that.

President.—But when the thing is partly manufactured in India it is very uncertain as to how much may be really Indian material or workmanship.

Mr. Humby.—That is so.

Mr. Pitkeathly.—Except that, if it purports to be Indian material, I have the Metallurgical Inspector's certificate.

President.—Will you just give us a general idea of the percentage?

Mr. Pitkeathly.—Take the case of a works like Messrs. Jessop and Company. The percentage of material not manufactured in the country will naturally be higher in their case than in the case of the Indian Standard Wagon Works.

President.—That is an important point.

Mr. Pitkeathly.—That is a very important point. Again in the case of the Peninsular Locomotive Company, that Company has just started building wagons. I feel that I could not here have as rigid an insistence on manufacture in India as I could in the case of an old established works that had been doing work for a considerable time. We take these points into consideration keeping in mind that the main object is to get manufacture started in the country, and we satisfy ourselves that the Company are making every endeavour to manufacture in India as great a percentage of the component parts as may be practicable, having regard to the capacity of the works, equipment, etc.

President.—If you could give us the percentage, it would be useful.

Mr. Pitkeathly.—Yes, I will.

Dr. Matthai.—In determining what is a substantial portion of the component parts the matter rests entirely with the discretion of the Inspecting Officer.

Mr. Humby.—It is not his discretion.

Dr. Matthai.—There is no rule of thumb about that.

Mr. Humby.—It is absolutely there, because we have the Inspector's certificate of the materials. If the material is ordered from home we have the Consulting Engineer's certificate covering that material. My Inspector checks the material when it arrives in the firm's works against that certificate.

Dr. Matthai.—Supposing you find that out of the total cost of fabrication in a particular piece of work, 60 per cent. is done outside and 40 per cent. here, would you call that a substantial portion?

Mr. Humby.—That is not for me to say.

Mr. Pitkeathly.—I would answer that question in this way. In the case of a young works not very well equipped, we are willing to allow a higher percentage of imported component parts than in the case of an up-to-date wagon building works.

President.—When you come to castings, it will become more clear.

Mr. Humby.—Yes.

President.—Take the case of a firm. It can get the Indian material here, but it will use imported material. In that case what action would you take against such a firm apart from special circumstances such as those you have mentioned?

Mr. Pitkeathly.—Then it will be a case of pointing out that this firm is not fulfilling the conditions.

President.—Have you ever to caution a firm?

Mr. Pitkeathly.—We have not had any occasion.

President.—Not up to now?

Mr. Pitkeathly.—No. Another difficulty that I have in this case is that the bounty system has been working only for the last two or three years. The growth and development of the wagon industry is a slow affair and you may not be able to attain the whole of your object in three years. Our idea was to get started and gradually to tighten up things as manufacture developed.

President.—That is easier I should say when the industry is assisted by means of bounties, but when they want a duty, and supposing it is imposed, what control would you have in that case?

Mr. Pitkeathly.—I should have no control except the control of not placing any order if it is shown that they are not wholeheartedly carrying out the policy.

President.—That is to say, they will suffer for it in the following year.

Mr. Pitkeathly.—Yes.

President.—That would be sufficient control.

Mr. Pitkeathly.—Yes, I think this would be quite effective.

Dr. Matthai.—With regard to the conditions on which bounties are given on wagons, there is one condition in Section 5 which speaks of facilities for the technical training of Indians in these works. Is it part of your business to see to that?

Mr. Pitkeathly.—As a matter of fact we examined that to start with. We were satisfied that every single works in India gave facilities for technical training of Indians.

Dr. Matthai.—Could you give me a general idea since the Steel Industry (Protection) Act was passed whether there has been any increase in the facilities given for technical training of Indians in the firms which have been receiving bounties?

Mr. Pitkeathly.—I am sorry I have not got the papers dealing with that point here. In the case of the Peninsular Locomotive Company, we asked the Company to put up the scheme which they proposed to introduce to meet this requirement. We, as a technical department, were not altogether satisfied with the scheme put up by the Company and proposed an alternative scheme which the Company accepted and which I understand is now in operation. I have not actually inspected their works, and am at present unable to say how far the matter has gone but I may say that the question of facilities for training of Indians has not been overlooked.

President.—If you can send us a copy, it will be useful.

Mr. Pitkeathly.—I will send you a copy of the correspondence.*

President.—Now about the standardisation of types of wagons. Are not the railways reducing the number of types gradually? From the orders you can see whether they are ordering a fewer types or not.

Mr. Humby.—There are 4 principal types.

President.—Which are the principal types?

Mr. Humby.—C-2, A-2, C-3 and A-1.

Mr. Pitkeathly.—Might I clear up a point here? Orders are being placed for particular types of wagons with particular wagon works and not indiscriminately.

President.—Is there much difference between C-2 and C-3?

Mr. Humby.—Not much.

President.—Are C-2 wagons covered wagons?

Mr. Humby.—No, they are open. A-2 are covered. Jessop and Company mostly have A-2. This point was considered three years ago. They are not building two types in one works.

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* Not printed.

President.—Then as regards the splitting of types, really speaking, there is no room for complaint now?

Mr. Pitkeathly.—No.

President.—In our earlier enquiry that was rather a difficulty, that they got more types than they could manage.

Mr. Pitkeathly.—Yes.

President.—As regards Jessops in particular, we were not able to see their works, because their works do not exist now, so far as Calcutta is concerned.

Mr. Humby.—The position at the moment is that they are in a transitional stage. They have taken land, about 64 acres, at Dum Dum and are gradually shifting out some of their structures and putting in their foundations and so on.

President.—But then whilst they are constructing, can they execute any orders?

Mr. Pitkeathly.—They are doing a certain number of wagons at Tatanagar.

Mr. Humby.—They are building a lot of their work at Tatanagar.

President.—Why should they have two different works?

Mr. Humby.—For the purpose of the firm's convenience.

Mr. Mather.—The history was that they put up structural works for the purpose of doing fabricating and erection work for Tatas' new plant. When that order came to an end, it appears that they did not get sufficient orders for structural work and therefore they started building wagons.

President.—In your account will you please tell us what is the capacity of the Jamshedpur works?

Mr. Humby.—Yes.

President.—What is the capacity of the Garden Reach works? There are hardly any.

Mr. Humby.—The present works at Garden Reach will be wiped out on the completion of the present contract, and their new works will be at Dum Dum.

Locomotives.

President.—As regards locomotives, the Peninsular Locomotive Works have put in an application again for the protection of locomotives. Their works were originally intended to be laid out for building locomotives, but the plant as put in now is really for wagons. I really want to know whether you can give us any opinion as to whether they would be in a position to build locomotives in the country.

Mr. Pitkeathly.—I should like before giving any opinion to have an opportunity of seeing the works again. I have not seen their works since they reconstructed it for wagons.

President.—It is a very difficult business to know whether their workshop is equipped for building locomotives when they are building only wagons just now. Would you please look into it?

Mr. Pitkeathly.—I shall examine this question and if I find myself in a position to express a definite opinion, I shall submit a report.

President.—There is one other point that they wish to make and that is during the last enquiry we said in order to have 'an economic unit' they must manufacture about 200 locomotives. Now they say that as they are building wagons at the same time in the same workshops they can do with a smaller order. I should like to know your opinion on that point as to whether it would lead to economy.

Mr. Pitkeathly.—I understand the question is what number of locomotives would form an "economic unit" for manufacture in the firm's workshops in conjunction with their wagon orders.

President.—I will put it this way. At that time we thought that there must be a unit of 200 locomotives, in order that production may be economic. In conjunction with wagons, what would you consider a reasonable unit assuming that our estimate of 200 locomotives was fairly accurate?

Dr. Matthai.—You don't place orders for locomotives, do you?

Mr. Pitkeathly.—We have bought locomotives required for constructional purposes but not for the main line railways.

President.—Please look at page 282 of Volume II of the Evidence recorded during the original enquiry into the Steel Industry. There we asked " What component parts of a locomotive can be manufactured from raw material produced in India? What parts can be manufactured in India from imported raw material? What parts must be imported in a completely finished state?" and then they give their reply. We should like to know your opinion on this point as to how far they can be manufactured in India. In our Report we said " With regard to raw materials it is estimated that about 50 per cent. of the total quantity of raw material required for locomotives can be obtained in India from the Tata Iron and Steel Company or from other local firms." We want to know whether that is just about right.

Mr. Pitkeathly.—Yes. I think this estimate is a reasonable one.

President.—Do you go and inspect any workshops owned by Railways?

Mr. Pitkeathly.—No.

President.—I suppose they have got their own Inspectors.

Mr. Pitkeathly.—Yes.

President.—I wanted to know whether you had any experience of the Ajmere Workshops where they build locomotives.

Mr. Pitkeathly.—No. I have no experience of these workshops.

Railway Fittings.

President.—The next item is railway fittings, forgings and things like that. I want to know generally whether you think that most of the railway fittings can be manufactured in India chiefly out of Indian steel.

Mr. Pitkeathly.—Yes, I do, with the exception of fittings which require wrought iron. Any mild steel fittings can be manufactured in India.

President.—Is there any inherent difference between this fabrication which consists of forging chiefly in the case of fittings and any other kind of fabrication work that is carried on in the country? In the process, is there any difference?

Mr. Pitkeathly.—A great many of these fittings are made out by drop stamping.

President.—That is comparatively easy.

Mr. Pitkeathly.—Given the plant, it is easy.

President.—There should be no insuperable difficulty in their being able to make these railway fittings here.

Mr. Pitkeathly.—No.

President.—As regards the fittings made at present, what is your experience, for instance, of those made by the Angus Engineering Works?

Mr. Humby.—They have recently turned out very good fittings indeed.

President.—Have they come up to specifications?

Mr. Humby.—Yes.

President.—What about their standard of workmanship?

Mr. Humby.—Their standard of workmanship is high class.

President.—Do you think that their claim that they can manufacture them on an economic scale is fairly well-founded?

Mr. Humby.—They can make these fittings but whether they can or cannot make them on an economic scale, I cannot say.

President.—How do they compare with the imported fittings?

Mr. Humby.—They compare very well.

Mr. Mather.—Does that apply to fittings made by other firms in India?

Mr. Humby.—Yes. The Indian Standard Wagon Company make most of their fittings—also Messrs. Burn and Company and Jessop and Company.

President.—If all these people make their own fittings, whom do the Angus Engineering Works make them for?

Mr. Humby.—For the Peninsular Locomotive Works and Jessop and Company.

Dr. Matthai.—Are they making the larger fittings leaving the smaller fittings to be made by the Angus Engineering Works or do the wagon building firms make all the fittings, both large and small?

Mr. Humby.—They make both large and small fittings.

Dr. Matthai.—There is no tendency to hand over the smaller fittings to the Angus Engineering Works?

Mr. Humby.—It is not for me to say.

President.—Is it not better for wagon builders on the whole to make their own fittings than to get them from outside? Which would lead to more economic results?

Mr. Pitkeathly.—I think the question of capital expenditure will enter into that.

President.—As regards the testing of these fittings, do you test them in the same way as you test other steel?

Mr. Humby.—We carry out the tests laid down in the specifications.

President.—Do they give detailed specifications for all kinds of fittings?

Mr. Pitkeathly.—They do. The specification gives the material, the finish and the drawing the size. As regards the material, there is inspection either at this end or at the other end. In the case of certain fittings such as draw bars or couplings, there are definite tests.

President.—What sort of tests do you apply?

Mr. Pitkeathly.—It depends on the kind of fittings. If it is a draw bar, the specification lays down that the tensile strength is not less than 70 tons for coaching stock. We take a percentage of the finished draw bars and test them in a tensile testing machine. In the case of couplings, a similar tensile test is specified and they are tested according to that. An impact test is also specified and this is carried out on an impact testing machine.

President.—Is the test laid down by the railways?

Mr. Pitkeathly.—It is laid down in the specification by the railways.

President.—You have got nothing to do with it.

Mr. Pitkeathly.—Our opinion may be taken when drawing up the specifications, but once it has been approved by the Railway Board, we have to go by the specifications. I may say that in cases where we find difficulty in working to a specification, we are at liberty to bring the matter to the notice of the Railway Board with suggestions for modification.

President.—Have they made alterations in their specifications in such a way as to permit the use of basic steel where they formerly insisted on acid steel?

Mr. Pitkeathly.—I don't think that in the case of axles they have done so. Nor have they done so in the case of boilers although the Indian Boilers Act now permits the use of either basic or acid steel?

President.—Do the railways permit the use of basic steel?

Mr. Pitkeathly.—My impression is that acid steel is still insisted on.

President.—So far as the Indian Boilers Act is concerned, it permits either basic or acid steel, so that there is no longer any difficulty. Provided you get plates of the proper size, thickness, etc., there should be no inherent difficulty in making boilers here.

Mr. Pitkeathly.—No.

President.—As regards locomotive boilers, they may still insist on acid steel?

Mr. Pitkeathly.—Yes.

Castings.

President.—Have you any experience of the steel castings made by the Hukumchand Electric Steel Works?

Mr. Humby.—Yes.

President.—How do they compare with the imported castings? Let us take railway castings. Can they turn out as good axle boxes as the imported ones?

Mr. Humby.—No.

President.—What is the difficulty?

Mr. Humby.—The trouble is that they have not the same finish as the imported axle boxes have.

President.—Is it a matter of appearance or is it a matter of use?

Mr. Humby.—It is a matter of use and appearance.

President.—Does it really interfere with its use as an axle box?

Mr. Humby.—No, they can turn out useful axle-boxes. Their axle-boxes are not really of a high degree of quality. They are not always of uniform size.

President.—They have been making a considerable number of axle-boxes for different railways. If they were not of a serviceable quality, the railways would not give them orders?

Mr. Mather.—Nor would you have accepted them?

Mr. Humby.—We have had to reject a considerable number of them.

President.—Let us be quite clear about it. First of all, you found that they were not well finished. That is a matter of appearance?

Mr. Humby.—Yes, partly.

President.—Next, you say there was some difficulty as to sizes?

Mr. Humby.—Yes.

President.—Does that interfere with the fitting or what?

Mr. Humby.—It depends on where that portion is. If it is at the side, it does not matter so much but if it is on the bearing faces, it is most important.

President.—As regards those which you do not reject on a ground like that, what are the defects?

Mr. Humby.—The only difficulty then is the appearance.

President.—In a new industry that is not a serious objection, is it?

Mr. Humby.—No, but the castings are very rough.

Dr. Matthai.—What do you mean by rough? Is it a point of appearance or accuracy?

Mr. Humby.—They are not smooth, nor accurate to dimensions. Instead, they are very badly marked and according to the size and number of blowholes the article may be considerably weakened.

President.—Does that affect the life of the axle-box?

Mr. Mather.—Would it be correct to say that generally the position is this, that the Hukumchand castings as presented to you contain an unreasonably large number of defective castings which you reject, but those that you accept are likely to prove as serviceable to the railways as the imported article?

Mr. Humby.—That is right.

President.—The point is very important because if the rejections are many, then their costs will naturally go up and I would like to know roughly the percentage of rejections.

Mr. Humby.—I can let you have that information.

President.—If you look at page 332 of the volume containing applications from Tatas and others in connection with the Statutory Enquiry you will find a list of the castings they make. We would like to have your opinion as regards those and the percentage of the rejections for 1924 or 1925 or 1926 as the case may be.

Mr. Humby.—Yes. I will do so.

Mr. Mather.—Do you receive any information which shows the number of castings which Hukumchand's have withdrawn before inspection and the total number of castings they make?

Mr. Humby.—No.

Mr. Mather.—So that the figures that you will give will be the percentage of rejection of those that are presented to you and not the percentage of those manufactured?

Mr. Humby.—No.

President.—On whose behalf do you carry out these tests so far as castings are concerned?

Mr. Humby.—For various railways mainly.

President.—Have you much experience of Continental castings?

Mr. Humby.—Only those which I have seen imported here.

President.—How do they compare with British castings?

Mr. Humby.—They compare very favourably.

President.—Are they quite as well finished as the British article?

Mr. Humby.—Quite.

President.—In that sense Indian castings compare unfavourably even with Continental castings?

Mr. Humby.—Yes.

Spring Steel.

President.—I understand Hukumchands want to manufacture spring steel and they had some tests carried out. Did you carry out these tests?

Mr. Humby.—We had nothing to do with that. I think the Ishapore Gun and Shell Factory are rolling spring steel.

Engineering.

President.—Your department is also interested in engineering?

Mr. Pitkeathly.—Yes.

President.—Does it include structural, girder work and so on?

Mr. Pitkeathly.—Yes.

President.—On whose behalf do you have to act?

Mr. Pitkeathly.—For any Department of the Central Government, Local Governments, Minor Administrations and Public Bodies who may desire to utilize our services. We handle a considerable volume of work for the Military Engineering Services and we have placed orders for steel sections, structural work, etc., for various Local Government Departments.

President.—Does that include bridges?

Mr. Pitkeathly.—Not many bridges for them, but we have purchased some bridge spans for the Assam-Bengal Railway and for the Punjab Public Works Department and others.

President.—So far as fabricated structural work is concerned, in what way is inspection carried out?

Mr. Pitkeathly.—In the same way as the inspection of rails and wagon work.

President.—They may be building a bridge, say, in the Punjab. Do you send out a man there?

Mr. Pitkeathly.—Inspection at the site is sometimes a condition of the order but not always. In this matter we are guided by the wishes of the indenting officer. Our inspection, during manufacture, is exactly the same as in the case of railway wagons, etc.

President.—Do the railways ask you to do the inspection?

Mr. Pitkeathly.—The railways ask us to do that.

President.—They effect the purchases themselves?

Mr. Pitkeathly.—Yes, then they write to us and ask us to arrange for the inspection.

President.—You don't know the rates at which they place the orders?

Mr. Pitkeathly.—We incidentally know the rates, but we are not concerned with the rates at all.

President.—You don't keep a record of those rates?

Mr. Pitkeathly.—We don't.

Dr. Matthai.—The issuing of specifications is a part of your business as an inspection agency?

Mr. Pitkeathly.—No. The issuing of specifications will be done by the purchasing authority in outside work (*i.e.*, the outside authority that actually places the order) and then he will send us a copy of the specification to guide our inspection.

Dr. Matthai.—You issue two kinds of specifications, I understand, one general specification and the other special specification?

Mr. Pitkeathly.—Yes. A case in point would be, say, a large crane. When dealing with such a crane we should probably have a general specification dealing with the general requirements of the crane and a special specification dealing with the machinery and structural portions of the crane.

President.—I take it that when you issue these specifications you keep in mind the manufacturing conditions in the country?

Mr. Pitkeathly.—Yes.

Dr. Matthai.—I notice in one of your reports a special specification with regard to the Legislative buildings at Delhi.

Mr. Pitkeathly.—Yes.

Dr. Matthai.—All that was fabricated steel.

Mr. Pitkeathly.—Yes.

Dr. Matthai.—Do you know at all where the order was placed?

Mr. Pitkeathly.—Yes, the whole of the steel was made by Tatas and the fabrication was done by Messrs. Jessop and Company.

Purchase of materials.

President.—I will proceed now to the purchase of materials. Have any substantial alterations been made in the Stores Purchase Rules since we last reported?

Mr. Pitkeathly.—Revised Stores Purchase Rules were issued on the 6th May 1924.

President.—I just want to know what are the main alterations made in the rules.

Mr. Pitkeathly.—In the preamble it is laid down that we should make the fullest use of the resources of the country and the main alteration in Rule 1 is that purchases should be made in this country provided prices are reasonable.

President.—Instead of being " not unfavourable " as before.

Mr. Pitkeathly.—Yes.

President.—Do you think that that has considerably enlarged your discretion?

Mr. Pitkeathly.—Yes, under these rules; but my position in the matter, as you know, is rather a difficult one.

President.—This question arises only when there is a foreign article in competition against the Indian article.

Mr. Pitkeathly.—Yes.

President.—The articles with which we are concerned are chiefly steel articles. As regards plain rolled steel, the question cannot arise, can it?

Mr. Pitkeathly.—The question does not arise at the moment, the level of price to-day is in favour of Indian products.

President.—So, that doesn't arise.

Mr. Pitkeathly.—No.

President.—It would arise in connection with fabricated steel.

Mr. Pitkeathly.—Yes.

President.—In that case how do you make the comparison? Let us take a 100 ft. span.

Mr. Pitkeathly.—We should go into the market with the specification and invite tenders. We should cable to the Director General of Stores, London, asking him to let us know his price for this article.

President.—There are two things in that. The first is that the local manufacturer has got to pay duty on his raw material at about Rs. 40 a ton.

Mr. Pitkeathly.—Yes.

President.—The foreign manufacturer pays an *ad valorem* duty of 25 per cent. on the fabricated steel.

Mr. Pitkeathly.—Yes.

President.—Then the girder that comes may not necessarily be in the same stage of manufacture as the one here. In such a case how do you adjust the difference?

Mr. Pitkeathly.—As regards the same stage of manufacture.

President.—First of all let us take the question of duty.

Mr. Pitkeathly.—As regards the duty the orders are clear.

President.—You have to take the duty into account.

Mr. Pitkeathly.—The actual calculation will be based on the rate laid down in the Tariff Schedule for that particular article.

President.—You may have to make adjustments. The Indian manufacturer has got to pay a specific duty of Rs. 40 on his raw material. Then he gets, on his fabrication, a protection of 25 per cent.

Mr. Pitkeathly.—Of course, I would find very great difficulty in handling the whole of my business on these lines. There are many other cases in which the same thing would apply. Take the case of electric fans which are subject to 2½ per cent. duty. The component parts if imported separately would be liable to duties varying between 10 per cent. and 30 per cent., while the finished fans come under 2½ per cent. duty. But as a buyer I cannot analyse in detail every single article which I may have to purchase to do so. It would not be practicable.

President.—That is precisely what these people complain about.

Mr. Pitkeathly.—I can only follow the rule which says that the duty shall be added according to the rate laid down in the schedule but I see the unfairness.

President.—And to alter that you consider is impossible.

Mr. Pitkeathly.—That is not possible.

President.—The comparison cannot be real always.

Mr. Pitkeathly.—No.

President.—You cannot do more than that. When a fabricated steel article manufactured in this country has to be compared with an article that is imported, there are so many items to consider that it is not possible to measure so to say the relative values.

Mr. Pitkeathly.—Of course in some particular items like fabricated girder work, we could calculate them in a detailed way, but it could not be done in the case of all the items of material and plant we handle. It would be extraordinarily difficult to analyse every single item.

President.—There may be a difficulty in that. For instance, the foreign manufacturer would not ordinarily rivet all the fabricated parts.

Mr. Pitkeathly.—I was rather thinking of a work which is complete in both cases.

President.—There are two points arising in that connection. One is as regards the difference in the duty on fabrication and imported material and the other is as to the stage of manufacture which each article has reached. Take the case of wagons for instance.

Mr. Pitkeathly.—They have got to be assembled out here.

President.—They also complain that all the items are not taken into account. Take the case of a 100 ft. span which is not rivetted. That would come in pieces.

Mr. Pitkeathly.—The particular girder would be complete to the same extent as the girder fabricated in this country.

President.—It comes in this way. Take Messrs. Burn and Company, for instance. They have got to construct a bridge, say, 100 miles away from here. They would first have to construct the bridge in their workshops, they will have to dismantle it afterwards and then will have to re-erect it. When the thing is imported from abroad somebody has got to do the erection for the foreign firm. In that case a certain amount of adjustment has to be made. In this respect the local manufacturer complains that there are certain items which may not be included when a comparison was made. Does that happen in your case?

Mr. Pitkeathly.—We have bought and are buying bridges assuming that spans are complete in both cases.

President.—There are no adjustments to be made.

Mr. Pitkeathly.—No. The only adjustment is that it would be for us to include for the erection of the bridge at the site. We add the cost of erection to the home price.

President.—In such a case you would, from your experience, add certain items.

Mr. Mather.—Have you had such cases?

Mr. Pitkeathly.—No. We should definitely ask for tenders giving f.o.b. or c.i.f. price and extra price for erection at site. It is with landed price inclusive of erection that we would compare the prices tendered by the local firms.

President.—In that way you may be able to get over the difficulty.

Mr. Pitkeathly.—Yes.

Mr. Mather.—In that case it would be for the outside firm sending out the fabricated steel work to make its own arrangements with some contractor here for the erection and include his price with theirs, so that it may be exactly comparable.

Mr. Pitkeathly.—Yes.

President.—Do you mean to say you can get the foreign manufacturer to give you a complete price?

Mr. Pitkeathly.—We have had no difficulty in getting complete prices in many of the items we have handled.

President.—And they undertake to get it erected.

Mr. Pitkeathly.—Yes, and hand over to us with a final inspection at the site. A great deal of our business is on these lines. We hold the contractor responsible right up to the handing over the plant at the site.

President.—Has it happened that when you have been asked to purchase, say, structural steel or any other steel, on behalf of the department you have not been able to secure the order for the Indian manufacturer by reason of some rule coming in your way?

Mr. Pitkeathly.—No, not by reason of a rule, but owing to the price being higher.

President.—Under the new rules you would not necessarily be guided by the difference in price. There may be other considerations.

Mr. Pitkeathly.—We can't ignore the price altogether. The rule lays down that we shall make comparisons.

President.—I don't mean to say that you can ignore the price altogether. Supposing there is a slight difference in the price, the fact that you have got the Indian manufacturer here on the spot whose works you can inspect while it is being carried out and so on would weigh with you, would it not?

Mr. Pitkeathly.—Yes, we always take this into consideration when placing an order.

President.—Can you give us a few instances where orders have been lost during the last two years owing to prices being higher?

Mr. Pitkeathly.—Yes. It will take a little time to get out the figures. I hope to be able to send you this information in the course of the next week or two.

President.—We want these instances only as regards steel.

Mr. Pitkeathly.—Yes. I think I have only two or three cases in my mind. We have been able to place our orders with the Indian manufacturer except in two or three cases.

Dr. Matthai.—Do you mean two or three cases since the department came into existence?

Mr. Pitkeathly.—Since the Steel Industry (Protection) Act came into force.

President.—May I take it that when a department wishes to purchase a thing and informs you of that, you purchase it without any further reference to that department, subject to the rules, or what is the procedure?

Mr. Pitkeathly.—The procedure is that when an indent is sent to us by any department supported by specifications, etc., we go ahead and call for tenders. If the tenders are within the price given in the indent, or the excess is within certain limits, we purchase without further reference to the indentor. Should the price of the lowest satisfactory tender exceed the amount of the indent by 10 per cent. or Rs. 10,000 whichever is less, we refer the matter back to the indentor for his sanction and having obtained this, place the order and arrange for the material to be inspected and delivered after inspection. When referring an indent back to the indentor on account of an excess over his indent price, the indentor is not as a general rule informed who the suppliers are. We simply say " The best tender is so much in excess of the amount specified in your indent. Do you agree to this?" We do not specifically state whether the article is of Indian or foreign manufacture unless there may be any particular reason for doing so.

President.—As regards unfabricated steel, do you fix the price per ton?

Mr. Pitkeathly.—We get the price per cwt. for comparison. In the case of bridge spans, the tender is for a lump sum.

President.—But the weight also would be given.

Mr. Pitkeathly.—Yes, the total weight is given.

President.—You have been sending us the prices at which you have been importing fabricated material, but I don't think that we have got the price at which you have placed orders in the country itself.

Mr. Pitkeathly.—We can give that to you.

President.—If you can give us a consolidated statement showing the prices of the imported fabricated material as well as the fabricated material locally purchased, say, from 1924 up to date, it will be useful.

Mr. Pitkeathly.—Do you want the figures for two years, *viz.*, 1924-25 and 1925-26?

President.—Yes. Give us the figures separately for rolled steel and fabricated steel both as regards local purchases and imported through the Director General of Stores.

Mr. Pitkeathly.—Yes. (Mr. Pitkeathly here handed in a statement showing the value and quantity of steel purchased by the Director General, India Stores Department, London, during 1924-25 and 1925-26.)

President.—Will you kindly let us have further statements as the figures become available?

Mr. Pitkeathly.—Yes.

President.—So far as your freight is concerned, you get a special freight rate which the Secretary of State gets.

Mr. Pitkeathly.—Yes. We place the order with the Director General of Stores who gets a concession rate.

President.—When you are indenting abroad, I take it that you send your order to the Director General of Stores.

Mr. Pitkeathly.—The system we follow is that we call for simultaneous tenders and if we find that the Director General of Stores is in a position to supply an article at a more favourable rate, we inform the indentor and tell him that the indent should be sent to the Director General of Stores, London. In exceptional cases we instruct the Director General of Stores on behalf of the indentor to place an order for a particular article. The indentor regularises the matter by sending a confirmatory indent to the London Stores Department.

President.—Are you empowered to deal direct with the manufacturer outside India?

Mr. Pitkeathly.—No. We only deal with the manufacturers in India.

President.—In every case you must so to say transfer the indent to the Director General of Stores.

Mr. Pitkeathly.—Yes. If we find that the Director General of Stores' rates are more favourable, we inform the indentor and ask him to send his indent to the Director General of Stores. If it is a complicated case and if we have prepared the specification and invitation to tender, we may, with the indentor's permission, place the order with the Director General of Stores on his behalf. We do that by telegram (subject to confirmation by the indenting officer). All subsequent transactions are between the indentor and the London Stores Department.

President.—Do you still get copies of the indents sent by other departments?

Mr. Pitkeathly.—Yes.

President.—When you find an order going abroad which ought to be placed here, do you still take action?

Mr. Pitkeathly.—Yes, we still take action. I may tell you candidly that we are not satisfied with the results that we have obtained in this direction. When our Administration Report for 1925-26 is issued you will see that during the last year, demands amounting to about Rs. 41 lakhs were questioned by us. Some of these demands were cancelled and placed in India, and these came to roughly 11 per cent. This is not altogether satisfactory. We are taking the matter up with the Government of India. I think that the result will be that we will tighten up matters considerably.

President.—That is to say, the orders still go abroad when they might be placed here.

Mr. Pitkeathly.—I must admit that that is so.

Mr. Mathias.—Do you order on behalf of Provincial Governments?

Mr. Pitkeathly.—Yes.

Mr. Mathias.—On behalf of all of them?

Mr. Pitkeathly.—On behalf of a large number of them. I may explain that there is no obligation on them to utilize the Indian Stores Department.

Mr. Mathias.—They are coming to you more now than during the last enquiry?

Mr. Pitkeathly.—Yes.

President.—Rs. 41 lakhs that you challenged, what percentage is it of your total purchases? What would be your total purchases in a year?

Mr. Pitkeathly.—Our purchases last year came to Rs. 266 lakhs.

Mr. Mather.—If your " challenges " ultimately proved to be justified, you would have increased your purchases.

Mr. Pitkeathly.—As a result of our " challenges," we diverted orders to India for about Rs. 4,88,000.

President.—I suppose practically after the indent has been sent abroad, you come to know of it.

Mr. Pitkeathly.—We come to know the moment the indent has gone. We get a copy simultaneously with despatch to London. But we still have time to take action. We have taken action in many cases like that.

President.—You do that by cable then.

Mr. Pitkeathly.—No. We communicate with the indentor. Some of the departments on their own send us their draft annual indents as soon as they have prepared them for our remarks. In certain cases, of course, it will mean some delay. In the case of the Army, they frequently send over their indents to us before they issue them and then we " challenge " anything which can be obtained in India. In the case of others, it is not so easy.

President.—In these indents that you challenged, was there much steel?

Mr. Pitkeathly.—Yes, a fair quantity including bridge spans, steel structures, etc. (Showed a statement.)

The Agricultural Implements Company.

President.—I forgot to ask you about this before. You know that the Agricultural Implements Company at Jamshedpur has now been taken over by Tatas. Could you give us the import prices of the kind of tools that they make? It is rather difficult to get those prices. Please give us also the weights of tools. Otherwise they won't be comparable. I want you to take a few typical cases.

Mr. Pitkeathly.—Yes. I will give you the information we have.

President.—Have you tested these tools? Have you found them satisfactory?

Mr. Pitkeathly.—I have not seen any recent tests. I saw them when they were run by the Bombay Company.

President.—You know in the Legislative Assembly they took these to mean actual agricultural implements. Are they agricultural implements, or are they used by the Public Works Department, the Irrigation Department, Railways and others? Do you consider them as agricultural implements?

Mr. Pitkeathly.—I think that the name is rather unsuitable. The Public Works Department, the Irrigation Department and the Railways use a large quantity of these.

President.—Are they the principal consumers?

Mr. Pitkeathly.—Yes. I think they are the main consumers although tea gardens, etc., use a number of these implements.

Simultaneous "Rupee Tenders."

President.—What is the position as regards the simultaneous rupee tender? Has that question been considered by the Industries Department yet?

Mr. Pitkeathly.—The Government of India is considering the whole matter now, but no orders have yet been passed.

President.—Then we cannot ask any questions about that, but the point arises in connection with wagons in this way. Supposing we were to recommend the imposition of a duty, then it may be advisable to ask for rupee tenders here in this country.

Mr. Pitkeathly.—Yes, in order to put both parties in the same position.

President.—Do you know when orders are likely to be passed?

Mr. Pitkeathly.—No.

President.—At present when simultaneous tenders are asked for, the British tenderer tenders in sterling and the Indian tenderer in rupees. Is that the practice?

Mr. Pitkeathly.—Yes.

President.—One gives delivery f.o.b. British port and the other here?

Mr. Pitkeathly.—In our case we ask the Director General of Stores to obtain tenders on the f.o.b. basis and then quote freights separately and we ask firms in India to do the same thing. Their tenders are in rupees and we convert the Director General of Stores tender at 1*s.* 6*d.* exchange.

President.—The exchange may work in a peculiar way sometimes. It has not always been 1*s.* 6*d.*?

Mr. Pitkeathly.—No. This point was very carefully considered by the Government of India and it was decided to take at 1*s.* 6*d.* as the basis of comparison of the conversion price apart from whatever the exchange may be.

Dr. Matthai.—Your total purchases last year you said amounted to 2 crores 68 lakhs of rupees. How much of that were articles of the kind covered by the Steel Industry (Protection) Act? Does your Administration Report contain figures which will help us to see that?

Mr. Pitkeathly.—I have here a draft Administration Report, but I am afraid I shall have to separate the figures in detail.

Dr. Matthai.—These steel articles which are covered by the Act are dealt with by you partly in your engineering section and partly in your hardware section, are they not?

Mr. Pitkeathly.—Yes.

Dr. Matthai.—You give a list in the 1924 Report which gives me the idea that roughly about Rs. 12 lakhs would correspond to the value of "protected" articles, out of the total purchases you made in the engineering section which, of course, is a very small percentage.

Mr. Pitkeathly.—That is so.

Dr. Matthai.—Outside certification for bounties and advice with regard to technical training, there is no other work that is thrown on your department by the protection?

Mr. Pitkeathly.—Except certifying for bounties on wagons and steel ingots.

Dr. Matthai.—A part of the assistance that you render to purchasers here is to get them home prices for comparison from the Director General of Stores. You do that work sometimes for purchasers, don't you?

Mr. Pitkeathly.—Yes, many times we have done that.

Dr. Matthai.—In that case the Director General gives you the f.o.b. quotation and the freight?

Mr. Pitkeathly.—Yes.

Dr. Matthai.—When you communicate the information to the purchaser do you give clear instructions as to all the extra charges that have to be incurred?

Mr. Pitkeathly.—We invariably work out the extra charges. We have got a standard form. We simply add everything in accordance with the conditions of rule 8 of the Stores Rules.

Dr. Matthai.—I don't know if you remember the case of some tugs that were purchased or were going to be purchased for the Sukkur Barrage. It came to our notice during our enquiry into the ship building industry that the officer in charge made some mistake with regard to the calculation of the duties. If you gave him the total price including all the charges I don't see how the mistake could have arisen, because the duty would have been included in the price. The point is, you got the quotation from the Director General of Stores and the officer concerned made a mistake and thought that the home price was really cheaper than the Indian price because he did not take the full duty into account?

Mr. Pitkeathly.—I will look up the case and let you have a note about it.

Dr. Matthai.—You have been telling Mr. Mathias that the Local Governments are buying more through you than before. What about the non-Government agencies; are they doing the same thing?

Mr. Pitkeathly.—Yes, to a small extent. Their business is not very large. It only amounted to Rs. 67,000 in the engineering section in 1925-26.

President.—Do the Government departments pay the duty?

Mr. Pitkeathly.—They pay the duty.

President.—Is there any adjustment between the Local Governments and the Central Government?

Mr. Pitkeathly.—I understand the position is that those Local Governments who have been given a reduction in their provincial contribution do not get a remission of customs duty. The other Local Governments who have got no reduction of provincial contribution still receive the remission of customs duty.

President.—The rebate does not go to the department concerned, but to the general revenues of the Local Government?

Mr. Pitkeathly.—I understand that is the position.

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II.—Correspondence regarding prices of rolled steel.

(1) *Letter from the Tariff Board, to Messrs. Geo. Service and Co., Balmer Lawrie and Co., Richardson and Cruddas, Burn and Co., Jessop and Co., Anandji Haridas and Co., Mr. G. B. Trivedi and the Bombay Iron Merchants' Association, dated the 17th April 1926.*

I am to say that the Tariff Board have been directed to re-examine the question of protection for the Steel Industry. During their enquiry the prices of steel will have to be fully investigated and I am therefore to ask if you would be kind enough to supply the Board with six copies of a statement giving the c.i.f. sterling prices/market prices,* month by month, from May 1925 up to April 1926, of the following kinds of rolled steel:—

British beams.
British angles.
British bars.
British plates ⅛ inch thick and upwards.
British galvanised corrugated sheets.
British black sheets.
Continental beams.
Continental angles.
Continental bars.
Continental plates.
Continental black sheet.

If you are unable to give the prices of all of these kinds, the Board would nevertheless be glad to have the prices of as many kinds as possible.

2. In addition I am to request you kindly to supply a monthly statement containing the information set out above from the month of April onwards until the conclusion of the Board's enquiry.

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(2) *Letter from Messrs. Balmer Lawrie and Company, Limited, dated 24th April 1926.*

With reference to your memo. No. 164 of the 17th instant, we have pleasure in sending herewith 6 copies of statement giving the c.i.f. sterling prices per cwt. from May 1925 to April 1926.

We will, as you request, supply a monthly statement on and from to-day containing the information given in the enclosed statement.

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* To Messrs. Anandji Haridas and Co., Mr. G. B. Trivedi, and the Bombay Iron Merchants' Association.

—	1925.								1926.			
	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Br. Joists	8 15 0	8 10 0	8 7 6	8 6 6	8 5 0	8 0 0	7 12 6	7 10 0	7 10 0	7 10 0	7 10 0	7 10 0
Br. Angles	8 15 0	8 10 0	8 7 6	8 7 6	8 5 0	8 0 0	7 12 6	7 10 0	7 10 0	7 10 0	7 10 0	7 10 0
Br. Bars . .	9 5 0	9 5 0	9 0 0	8 17 6	8 12 6	8 12 6	8 12 6	8 12 6	8 12 6	8 12 6	8 12 6	8 15 0
Br. Plates	9 15 10	9 13 4	9 8 4	9 5 10	9 13 4	8 18 4	8 10 10	8 5 10	8 5 10	8 5 10	8 5 10	8 5 10
G. C. Iron	17 15 0	17 12 6	17 10 0	17 12 6	17 17 6	18 0 0	18 0 0	18 0 0	18 0 0	17 12 6	17 12 6	17 0 0
Cont. Joists . . .	6 14 2	6 12 11	6 10 5	6 10 5	6 10 5	6 5 10	6 5 10	5 15 10	6 0 10	6 0 10	6 0 10	5 18 4
Cont. Angles . . .	6 18 4	6 15 10	6 15 10	6 13 4	6 10 10	6 10 10	6 10 10	6 3 4	6 5 10	6 8 4	6 8 4	6 3 4
Cont. Bars	6 18 4	6 15 10	6 15 10	6 13 4	6 10 10	6 10 10	6 10 10	6 3 4	6 5 10	6 8 4	6 8 4	6 3 4
Cont. Plates. . . .	8 3 4	7 18 4	7 15 10	7 13 4	7 13 4	7 5 10	7 5 10	6 10 10	6 10 10	6 10 10	6 10 10	6 8 4

(3) (a) *Letter from Messrs. Burn and Company, Limited, dated the 7th/10th May 1926.*

With reference to your letter No. 164 of 17th April 1926, we enclose herewith 6 copies each of a statement showing c.i.f. sterling prices from May 1925 to March 1926, for British and Continental material as enumerated in your above quoted letter.

Kindly note that the prices for the month of April 1926 are not available at present.

As requested we are arranging to forward a monthly statement of prices as they fall due.

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British.

—	Ship Plates.	Sheets ⅛″.	Angles.	Flats 5″ and over.	Rounds 3″ to 5½″.	Joists.	" Castle " Brand Galvd. Corrg. Sheets 22/24 G. per ton c.i.f. Calcutta.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
May 1925	9 12 0	11 12 3	8 12 0	9 4 6	10 7 0	8 12 0	17 12 6
June 1925	9 11 6	11 8 6	8 10 1	9 0 9	10 3 4	8 10 1	17 12 6
July 1925	9 0 0	11 7 3	8 7 3	8 18 3	9 14 1	8 7 3	17 12 6
August 1925	9 5 9	11 7 3	8 4 2	8 14 2	9 12 1	8 4 2	17 8 8
September 1925 . . .	9 0 9	11 7 3	8 1 7	8 12 3	9 12 1	8 1 7	17 10 7
October 1925	8 17 0	11 7 3	7 16 5	8 9 0	9 4 0	7 16 5	17 15 6
November 1925 . . .	8 9 6	11 3 5	7 11 3	8 1 11	9 2 0	7 11 3	18 0 0
December 1925 . . .	8 1 11	10 12 2	7 6 11	8 5 0	8 17 0	7 6 11	17 19 6
January 1926	8 1 11	10 9 6	7 6 11	7 16 11	8 17 0	7 6 11	17 17 6
February 1926 . . .	8 1 11	10 7 2	7 6 11	7 16 11	8 17 0	7 6 11	17 9 11
March 1926	8 1 11	10 7 2	7 6 11	7 16 11	8 17 0	7 6 11	17 7 5

Continental.

—	Ship Plates.	Steel Sheets ⅛″.	Steel Bars.	Steel Angles.	Joists.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
May 1925	7 19 6	8 1 3	6 7 6	6 7 0	6 0 9 per ton c.i.f. Cal.
June 1925	7 15 4	8 0 10	6 6 3	6 6 3	6 0 4
July 1925	7 17 2	7 19 8	6 7 10	6 7 10	6 2 0
August 1925	7 17 2	7 15 0	6 6 2	6 6 4	6 0 3
September 1925	7 14 2	7 12 8	6 4 0	6 4 0	5 19 6
October 1925	7 9 8	7 9 9	6 3 2	6 3 2	5 18 0
November 1925	7 2 5	7 4 0	5 19 2	5 18 11	5 12 2
December 1925	6 12 0	6 16 4	6 0 1	5 19 7	5 12 3
January 1926	6 14 3	6 16 3	6 1 8	6 1 8	5 13 2
February 1926	6 13 8	6 15 3	6 0 10	6 0 10	5 13 2
March 1926	6 11 9	6 14 0	5 19 8	5 19 8	5 11 9

(3) (*b*) *Letter from Messrs. Burn and Company, Limited, dated the 15th July 1926.*

As promised in our letter No. S. A. 4697—2841 of 7th May 1926, we enclose herewith six copies of each of a statement showing c.i.f. sterling prices for the months of April and May 1926 for British and Continental materials.

BRITISH.

—	Ship Plates.	Sheets ⅛″.	Angles.	Plate 5″ and over.	Rounds 3″ to 5½″.	Joists.	"Castle" Brand Galvanised Corrugated Sheets 22- -24 G.
	£ *s.* *d.*	£ *s.* *d.*	£ *s.* *d.*	£ *s.* *d.*	£ *s.* *d.*	£ *s.* *d.*	£ *s.* *d.*
April 1926 .	8 1 11	10 7 2	7 6 11	7 16 11	8 17 0	7 6 11	17 4 5 per ton c.i.f. Cal.
May 1926 .	8 1 11	10 7 2	7 6 11	7 16 11	8 19 6	7 6 11	16 18 8

CONTINENTAL.

—	Ship Plates.	Steel Sheets ⅛″.	Steel Bars.	Steel Angles.	Joists (untested).
	£ *s.* *d.*	£ *s.* *d.*	£ *s.* *d.*	£ *s.* *d.*	£ *s.* *d.*
April 1926 . .	6 14 7	6 14 8	5 19 9	5 19 9	5 12 9 per ton c.i.f. Cal.
May 1926 . . .	6 14 7	6 14 1	5 19 6	5 19 6	5 12 6 per ton c.i.f. Cal.

(4) *Letter from Messrs. Richardson and Cruddas, Bombay, dated 23rd April 1926.*

We thank you for your letter No. 164 of the 17th instant, and have pleasure in sending you herewith six copies of the sterling c.i.f. prices of British and Continental steel from May 1925 to March inclusive.

We will let you have a monthly statement showing future prices as requested.

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—	BRITISH.						CONTINENTAL.				
	Beams.	Angles.	Bars.	Plates.	Galvanised Corrugated Sheets.	Black Sheets.	Beams.	Angles.	Bars.	Plates.	Black Sheets.
1925.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d	£ s. d.	£ s. d.	£ s. d.	£ s. d.
May . .	8 7 0	8 7 0	8 19 0	9 9 0	17 3 8	..	6 11 8	6 16 6	6 16 6	8 0 10	..
June . .	8 7 0	8 7 0	8 19 0	9 7 2	17 1 3	..	6 10 6	6 15 3	6 15 3	7 19 8	..
July . .	8 4 6	8 4 6	8 16 8	9 4 9	16 17 6	..	6 10 6	6 14 0	6 14 0	7 18 6	..
August . .	8 2 4	8 2 4	8 14 3	9 2 0	17 7 0	..	6 6 9	6 11 8	6 11 8	7 12 4	..
September .	8 2 4	8 2 4	8 14 3	9 2 0	17 7 0	..	6 2 0	6 7 0	6 7 0	7 7 9	..
October . .	7 16 0	7 16 0	8 8 3	8 13 2	17 6 0	..	6 0 8	6 4 4	6 4 4	7 1 4	..
November .	7 8 8	7 8 8	8 0 9	8 8 2	17 8 0	..	5 11 8	5 19 9	5 19 8	6 11 8	..
December .	7 8 8	7 8 8	8 0 9	8 3 4	17 8 0	..	5 12 2	5 19 9	5 19 6	6 6 9	..
1926.											
January . .	7 8 8	7 8 8	8 0 10	8 3 4	17 3 8	..	5 17 0	6 1 10	6 1 10	6 6 9	..
February . .	7 8 8	7 8 8	8 0 10	8 3 4	16 16 4	..	5 17 0	6 1 10	6 1 10	6 6 9	..
March . .	7 6 3	7 6 3	7 18 6	8 0 10	16 14 0	..	5 18 3	6 4 4	6 4 4	6 6 9	..

(5) (*a*) *Letter from Messrs. Jessop & Co., Ld., dated 11th/14th May 1926.*

In attention to your letter No. 164, dated the 17th April 1926, we send you enclosed six copies of our c.i.f. sterling costs month by month from May 1925 up to April 1926 of the various kinds of rolled steel specified by you. Further costs will be quoted as soon as they come to hand.

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Statement of approximate c.i.f. Sterling cost of steel sections from May 1925 to April 1926.

—	May 1925.	June 1925.	July 1925.	August 1925.	September 1925.	October 1925.	November 1925.	December 1925.	January 1926.	February 1926.	March 1926.	April 1926.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
British.												
Beams	8 8 0	8 9 6	8 7 0	8 7 0	8 2 0	7 18 0	7 18 0	7 7 0	7 7 0	7 7 0	7 7 0	7 9 6
Angles	8 8 0	8 9 6	8 7 0	8 7 0	8 2 0	7 18 0	7 18 0	7 7 0	7 7 0	7 7 0	7 7 0	7 9 6
Bars	8 8 0	8 9 6	8 7 0	8 7 0	8 2 0	7 18 0	7 18 0	7 7 0	7 7 0	7 7 0	7 7 0	7 9 6
Plates	9 10 0	9 15 0	9 10 0	9 7 6	9 5 0	8 15 0	8 16 0	8 10 0	8 10 0	8 5 0	8 5 0	8 5 0
Galvanised Corrugated Sheets	17 5 0	17 2 6	17 2 6	17 2 6	17 17 6	17 17 6	17 17 6	17 12 6	17 12 6	17 7 6	17 7 6	16 12 6
Black Sheets . . .	..	..	..	..	..	11 5 4	..	..	..	..	..	..
Continental.												
Beams	6 8 0	6 10 6	6 9 6	6 9 6	6 5 6	6 2 6	5 17 0	5 15 0	6 0 0	5 19 6	5 18 6	5 17 0
Angles	6 15 0	6 14 0	6 11 6	6 10 6	6 6 6	6 9 6	6 2 0	6 2 0	6 5 6	6 6 6	6 5 0	6 0 0
Bars	6 15 0	6 13 0	6 11 6	6 10 6	6 6 6	6 9 6	6 2 0	6 2 6	6 6 0	6 6 6	6 4 6	6 0 0
Plates	7 15 0	7 15 0	7 12 6	7 10 6	7 3 6	7 1 6	6 11 0	6 7 6	6 10 0	6 10 0	6 8 6	6 5 6
Black Sheets . . .	..	..	..	..	..	..	10 15 0	10 6 8	..	9 13 5	..	..

CALCUTTA:
The 11th May 1926.

(5) (*b*) *Letter from Messrs. Jessop and Company, Limited, dated 10th July 1926.*

In further reference to our letter of 11th/14th May last, we enclose a statement of approximate c.i.f. sterling cost of steel sections for May and June 1926.

Statement of approximate c.i.f. sterling cost of steel sections for May and June 1926

	May 1926.			June 1926.		
	£	*s.*	*d.*	£	*s.*	*d.*
British—						
Beams	7	9	6	7	14	6
Angles	7	9	6	7	14	6
Bars	7	9	6	7	14	6
Plates	8	5	0	8	5	0
Galvanised corrugated sheets .	16	12	6	16	12	6
Black sheets		...			...	
Continental—						
Beams	5	17	0	5	14	6
Angles	5	19	0	5	14	6
Bars	5	18	6	5	14	6
Plates	6	3	6	6	1	6
Black sheets		...			...	

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(5) (c) *Letter dated the 27th August 1926, from Messrs. Jessop & Co., Ld.*

In continuation of our letter H. P., dated 10th July, we attach a statement showing the approximate c.f.i. Sterling cost of Steel Sections for July 1926.

It may be interesting for you to know that we have just had a quotation for American R. S. Beams of £10-7-6 c.f.i. Calcutta.

Enclosure.

Statement of approximate c.f.i. Sterling cost of Steel Sections for July 1926.

	JULY 1926.	
	British.	Continental.
	£ s. d.	*£ s. d.*
Beams	7 14 6	5 14 6
Angles	7 14 6	5 14 6
Bars	7 14 6	5 14 6
Plates	8 5 0	6 1 6
Galvanised Corrugated Sheets . .	17 2 6	......
Black Sheets	......	......

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(6) (*a*) *Letter from Messrs. Anandji Haridas and Company, dated the 20th May 1926.*

With reference to your letter No. 165 of the 17th April 1926, we beg to enclose herewith 6 copies of statements giving c.i.f. sterling prices (statement A) and 6 copies of Calcutta market prices (statement B) for beams, angles, bars, plates ⅛″, plates 3/16″ and up, black sheets and G. C. sheets, ruling from May 1925 to April 1926.

The monthly statements of subsequent months will follow in due course.

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STATEMENT A.

Sterling prices c.i.f. Calcutta for Continental Material.

Material.	May 1925.	June 1925.	July 1925.	August 1925.	September 1925.	October 1925.	November 1925.	December 1925.	January 1926.	February 1926.	March 1926.	April 1926.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Joists	..	6 10 0	6 9 0	6 9 0 6 10 0	6 4 0	6 2 0	5 16 0 5 19 0	5 17 0	6 1 6 5 19 0	5 19 0	5 17 0	5 12 6
Angles	6 15 0	6 12 6	6 12 6	6 0 0	6 5 0	6 6 0	6 2 0 6 10 10	6 1 0 6 3 0	6 3 0	6 6 0	6 5 0 6 2 6	5 16 6
Bars	6 15 0	6 12 6	6 12 6	6 8 4	6 5 0	6 4 6	6 0 10 6 1 6	6 2 6	6 2 6	6 3 0	6 5 0 6 1 6	5 16 6
Plates $\frac{1}{8}$"	8 10 0	8 5 0	8 2 6	8 0 0	7 12 6	7 10 0	7 2 0	6 16 0	6 18 6 6 17 0	6 19 0	6 18 6 6 17 0	6 13 0
Plates $\frac{3}{16}$"	8 0 0	7 15 0	7 12 6	7 7 6	7 2 6	7 2 6 7 0 0	6 19 0 6 10 0	6 6 0 6 5 0	6 5 0	6 5 0	6 5 0	
Black Sheets . . .	11 7 6	11 5 0	11 0 0	11 2 6 11 5 0	11 2 6	11 2 6 10 18 0	10 5 0 10 2 0	10 0 0	10 0 0	10 0 0	9 12 6	9 0 0
Galvanised Corrugated Sheets	17 12 6 17 11 3	17 2 6	17 2 6	17 5 0 17 7 6	17 12 6	17 12 6	17 17 6	17 16 3	17 12 6	17 5 0 17 6 3	17 2 6 17 0 0 16 13 9	17 0 0

STATEMENT B.

Calcutta Retail Prices for Continental Material.

Material.	May 1925.	June 1925.	July 1925.	August 1925.	September 1925.	October 1925.	November 1925.	December 1925.	January 1926.	February 1926.	March 1926.	April 1926.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Beams	6 6 0	6 0 0	6 0 0	6 0 0	6 0 0	6 0 0	6 0 0	5 0 0	5 0 0	5 0 0	4 12 0	5 0 0
Angles	7 8 0	7 4 0	7 6 0	6 12 0	4 12 0	6 10 0	6 10 0	6 10 0	6 8 0	6 6 9	6 6 0	6 2 0
Bars	7 0 0	6 12 0	6 12 0	6 12 0	6 12 0	7 0 0	7 0 0	6 14 0	6 14 0	6 14 0	6 10 0	6 4 0
Plates ⅛″	7 8 0	7 4 0	7 6 0	7 2 0	7 4 0	7 12 0	7 4 0	6 14 0	6 12 6	6 4 0	5 10 0	5 8 0
Plates $\frac{3}{16}$″ and up . . .	7 6 0	7 2 0	7 2 0	7 2 0	7 2 0	6 14 0	6 14 0	6 14 0	6 6 0	6 0 0	6 0 0	5 8 0
Galvanised Corrugated Sheets	14 12 0	14 12 0	14 10 0	14 12 0	14 14 0	16 2 0	16 0 0	15 0 0	14 12 0	14 2 0	14 10 0	14 0 0
Black Sheets . . .	8 12 0	8 4 0	8 6 0	8 4 0	8 6 0	8 6 0	6 4 0	7 14 0	7 12 0	7 14 0	7 14 0	7 8 0

N.B.—Price may be 0-4-0 per cwt. lower than the above figures when material is sold in lots and for payment before delivery.

(6) (*b*) *Letter from Messrs. Anandji Haridas and Company, Calcutta, dated 7th June 1926.*

With reference to your letter No. 204 of 6th ultimo, we beg to give below May prices of the steel articles in question :—

Articles.	Sterling c.i.f. prices.			Local retail prices.		
				Rs.	A.	P.
Joist	Remained unchanged			5	6	0
Bars	Ditto			6	8	0
Angles	Ditto			6	6	0
Plates $\frac{1}{8}$"	Ditto			5	10	0
Plates $\frac{3}{16}$" and up	Ditto			5	8	0
Black Sheets $\frac{3}{7}$" sheets . . .	Ditto			7	12	0
	£	s.	d.			
G. C. Sheets	17	2	6	14	4	0

The retail prices as shown above may be 0-4-0 per cwt. less when the article is sold in lots and for payment before delivery.

सत्यमेव जयते

(6) (*c*) *Letter No. H.-2145, dated the 7th July 1926, from Anandji Haridas and Company, to the Secretary, Tariff Board.*

With reference to your letter No. 204 of the 6th May 1926, we beg to give below June prices of the steel articles in question:—

Article.	Sterling c.i.f. prices.	Local retail prices.		
		Rs.	A.	P.
Joists	Remained unchanged	5	4	0
Bars	Ditto	6	8	0
Angles	Ditto	6	5	0
Plates $\frac{1}{8}$"	Ditto	5	6	0
Plates $\frac{3}{16}$"	Ditto	5	6	0
Black Sheets $\frac{3}{7}$" sheets	Ditto	7	12	0
	£ s. d.			
Galvanised Corrugated Sheets	17 12 6	14	6	0

The retail prices as shown above may be 4 annas per cwt. less when the article is sold in lots and for payment before delivery.

सत्यमेव जयते

(6) (*d*) *Letter from Messrs. Anandji Haridas and Company, dated the 7th August 1926.*

With reference to your letter No. 204 of the 6th May 1926, we beg to give below July prices of the steel articles in question: —

Articles.	Sterling c.i.f. prices per ton.			Local retail prices per cwt.		
	£	s.	d.	Rs.	A.	P.
Joists	5	12	6	5	4	0
Bars	5	12	6	6	8	0
Angles	5	12	6	6	5	0
Plates $\frac{1}{8}''$	6	9	0	5	6	0
Plates $\frac{3}{16}''$ and up	6	0	0	5	6	0
Black Sheets 3" sheets	8	3	6	7	14	0
G. C. Sheets	17	12	6	14	6	0

The above local retail prices may be -/4/- per cwt. less when the article is sold in lots and for payment before delivery.

(6) (*e*) *Letter from Messrs. Anandji Haridas and Company, dated the 6th September 1926.*

With reference to your letter of the 6th May 1926, we beg to give below August prices of the steel articles in question: —

Articles.	Sterling c.i.f. prices per ton.			Local retail prices per cwt.		
	£	s.	d.	Rs.	A.	P.
Joists	6	1	6	5	6	0
Bars	6	1	6	6	6	0
Angles	6	1	6	6	3	0
Plates $\frac{1}{8}''$	6	15	0	5	10	0
Plates $\frac{3}{16}''$ and up	6	10	0	5	8	0
B. Steel Sheets 14—18 G.	8	5	0	8	4	0
B. Steel Sheets 19—20 G.	11	5	0	8	4	0
G. C. Sheets	17	7	6	14	4	0

The above local retail prices may be -/4/- less when the article in lots and for payment before delivery.

सत्यमेव जयते

(6) (*f*) *Letter from Messrs. Anandji Haridas and Company, dated 7th October 1926.*

With reference to your letter of the 6th May 1926, we beg to give below September prices of steel articles in question:—

Articles.	Sterling c.i.f. prices per ton.	Local retail prices per cwt.
	£ *s.* *d.*	Rs. A. P.
Joists	6 10 0	5 8 0
Bars	6 10 0	6 10 0
Angles	6 10 0	6 4 0
Plates $\frac{1}{8}''$	7 15 0	5 14 0
,, $\frac{3}{16}''$ and up	6 15 0	5 12 0
Steel Sheets	9 16 8	8 4 0
G. C. Sheets	17 10 0	14 6 0 to 14 10 0

The above local retail prices may be Re. 0-4-0 less when the article is sold in lots and for payment before delivery.

सत्यमेव जयते

MESSRS. ANANDJI HARIDAS AND COMPANY.

B.—ORAL.

Evidence of Mr. ANANDJI HARIDAS recorded at Calcutta on Monday, the 2nd August 1926.

Prices of British and Combined steel.

President.—Your Company is known as Messrs. Anandji Haridas and Company.

Mr. Anandji.—Yes.

President.—You do business in Calcutta and also in Bombay.

Mr. Anandji.—In Calcutta only. There is our firm in Bombay not exactly identical,—Messrs. Moonji Haridas and Company.

President.—For how many years have you been doing business in Cal

Mr. Anandji.—About 7 years.

President.—And in Bombay.

Mr. Anandji.—The firm is about 40 to 50 years old.

President.—What was the ordinary difference between Continental and British steel in the pre-war days? For instance, how much more would a man pay for British steel than he would for Continental steel?

Mr. Anandji.—I cannot exactly tell you. So far as I have heard there was not any difference in the bazaar so far as British and Continental steel were concerned.

President.—I think there was a difference of about As. 8 a cwt. A man would probably pay about As. 8 more than he would pay for Continental steel.

Mr. Anandji.—So far as I know the bazaar didn't care much about the different kinds of steel. They wanted steel and they bought the cheapest kind of steel.

President.—What was the difference then?

Mr. Anandji.—I am afraid, I can't tell you.

President.—It is rather important. I think only one firm gave us some definite evidence in the 1st enquiry. That was the Calcutta Import Trade Association. It gave us definite figures at that time. This is what they gave us at that time.

		Per cwt.		
		Rs.	A.	P.
Angles	British	5	8	0
	Continental	5	0	0
Sheets	British	6	0	0
	Continental	5	8	0
Joists	British	5	8	0
	Continental	5	0	0

Mr. Anandji.—For what year is it?

President.—Pre-war.

Mr. Anandji.—I do n t know whether they are in actual touch with the bazaar. If you like I can find out the information for you.

President.—It is of some importance to know what is the real difference apart from the question of exchange and other things. The bars may be of inferior quality and they would not give us an accurate idea. I think as regards angles, sheets and joists, there won't be any question of quality and you can give us the difference in their prices.

Mr. Anandji.—I can find that out for you.

President.—You can give the price of bars too, because though bars would not be a good instance, the question of quality would enter.

Mr. Anandji.—You want to know the price actually paid by consumers to whatever class they may belong. So far as I know the bazaar consumers do not much care for the quality. The difference would be really to the engineering firms. They are particular about the quality and they would be paying a higher price.

President.—The bazaar man would pay the same price for both Continental and British steel?

Mr. Anandji.—Yes.

President.—Anyhow we just want to get the difference between the two prices as far as possible.

Mr. Anandji.—Yes.

President.—Of course since then the gap has become wider.

Mr. Anandji.—Now the position is that you would not find the British material in the bazaar at all. You will find some joists stocked by some people.

Mr. Mathias.—Is not the British material in competition with Continental?

Mr. Anandji.—Not in the bazaar.

President.—I take it that most of your business is in Continental material.

Mr. Anandji.—Yes, except for galvanized sheets.

Beams.

President.—We need not trouble you about prices before June 1925, because we have dealt with them in the last report. We want to see what has been happening since June 1925. We will start from June 1925 and see how they have been going. We shall start with beams. Have you got any British prices at all?

Mr. Anandji.—No, I have not given British prices.

President.—Since June 1925, according to your figures, there has been a drop of about 17*s*. 6*d*. in the c.i.f. price of beams. They stood at £6-10-0 in June 1925 and in May 1926 they were £5-12-6.

Mr. Anandji.—That is so.

President.—Speaking generally can you tell us what the drop may be due to? Is it chiefly due to exchange?

Mr. Anandji.—My personal inference is that it is due to the anxiety of Continental manufacturers to get more orders. That is mainly at the root of the reduction of prices. Exchange may have had some effect.

President.—So far as this is concerned, exchange doesn't seem to have made very much difference. If you take October 1925 after which the exchange very nearly collapsed, there has been a drop of 10 shillings.

Mr. Anandji.—Yes, roughly 10 shillings.

Mr. Mather.—The Belgian exchange was stable for several months, until it fell in February. The French exchange was comparatively less stable.

Mr. Anandji.—If you want just to find out how the prices have been varying with the exchange, you will note that recently during the last two months, although the fall has been probably the biggest, still there has not been a corresponding change in prices. On the other hand, I have looked at the British figures and I find that there has been very nearly the same amount of fall in the British prices in the period referred to.

President.—Take Jessops prices for instance. The drop in British beams was exactly £1 for the same period.

Mr. Anandji.—That shows the fall is practically the same unless you want to account for it in this way. The British prices have got to follow the

Continental prices and therefore the drop is indirectly the result of Continental depreciation.

President.—That would be the effect. British steel has got to live very largely on export and if the Continental prices dropped owing to any cause, either exchange or anything else, the British prices must show a tendency to drop.

Mr. Anandji.—That is true.

President.—Since 1923 there has been a difference of £2 or £3. You cannot put it down merely to a drop in the cost of production. The exchange must account for a good deal of it.

Mr. Anandji.—The argument might apply both ways. If it is due to the depreciated exchange, works could not for two or three years be going on working at a heavy loss. They would have shut down the furnaces. It would not pay them to go on. That might be suggested as an argument.

Mr. Mathias.—If the works are big, it would take them some time to close down. If you look at the balance sheets of many of the Iron and Steel Companies in England, you will find that they show very big losses each year. They have been doing so for two or three years and they have not yet closed.

Mr. Anandji.—It is practically 3 years since this has been going on. On the other hand my information is that on the Continent a number of works are idle. They don't get sufficient orders and therefore they have got to shut down the furnaces.

Mr. Mather.—That is so in Germany.

Mr. Anandji.—Even in Belgium I suppose it is the case.

President.—Do you think that the price would go very much lower still?

Mr. Anandji.—That is a question which the Board considered every time and every time thought that prices have reached the bottom. But the fall in the price goes on and nobody can say where it will stop. That is what the bazaar merchant feels. Only a week ago I had a telegram and long letters saying that it was time to make purchases and get a good average price and there was not much chance of prices going lower.

Mr. Mather.—They are beginning to think in the trade that prices are more likely to rise than to fall.

Mr. Anandji.—That is the feeling on the Continent, but in India people really don't know what is going to happen.

Mr. Mathias.—Can you tell me whether the steel trade is now more or less on a hand to mouth basis? There have been very few purchases forward in anticipation of prices going lower in the last two or three years. I understand many merchants have not been holding any very large stocks or buying forward much.

Mr. Anandji.—That was the case up to last December. Before the duties were imposed, people bought very heavily in the hope of making money. They burnt their fingers. They stopped importing and the market was in a hand to mouth condition. In November the prices were very high. There was a profit of about 15 to 25 per cent. in some sections. Then they started buying. The result was in March there were very heavy imports and consequently the market was overstocked and the prices fell below the cost of importing. Consequently at present purchases are made on a very small scale and for a few sections only.

Dr. Matthai.—Is the feeling that prices may not go down any further stronger this year than it was last year?

Mr. Anandji.—There is no feeling like that in the Indian markets. In India we don't know what the prices are going to be. That is the report we get from the foreign exporters. They say that prices have touched the bottom. It is pure guess work. It is very difficult to say what basis there is for this report.

President.—The ordinary buyer doesn't worry very much as to what is going to happen after a year.

Mr. Anandji.—After his past experience he has given up all efforts at guessing. He simply looks at the condition of the local market, what the demand is, what the stocks are and what prices he is going to get. These are the only things that guide him. The sales of the Tata Iron and Steel Company in the Calcutta market are an important factor. They were not a serious factor up to the beginning of 1925, but since then they have started a policy of just trying to control this market by selling now and then. Sometimes they sell a good quantity and prices don't go up and people don't buy much from foreign countries. Sometimes they get big orders, *e.g.*, the order they got at present from the North Western Railway, they don't care to sell to this market. There is a scarcity and people begin to buy heavily from abroad and then the prices go down. What really is required in the interests of trade is that there should be a consistent policy on the part of the Indian supplier to keep this market up to a certain extent well supplied.

President.—I shall come to that in a minute. You have given us your bazaar prices. Take the May 1926 figure Rs. 107-8-0.

Mr. Anandji.—For what article please.

President.—I am talking of beams. Your c.i.f. price is £5-12-6. That is exactly Rs. 75 at 1*s.* 6*d.*

Mr. Anandji.—Yes.

President.—With the duty of Rs. 30 on beams it comes to Rs. 105. If the bazaar price was below that, you must have been selling at some loss.

Mr. Anandji.—As you know in Continental joists especially there is a difference in the weight that we receive from the suppliers and the weight we supply here, *e.g.*, we sell 8 × 4 beams at 18 lbs. per foot, but when we buy, we buy at 17 lbs. per foot so that really there is a saving of one lb. per foot in weight. It would mean about Rs. 6 or Rs. 7 per ton. You would always find that the bazaar price for Continental joists and the cost of importing are very nearly the same, because there is the margin of weight.

Mr. Mather.—I have averaged your prices for the whole period for joists. Take this 11 months from June to April. Your import price for beams comes to about Rs. 81 per ton. If we add Rs. 5 for landing, Rs. 30 duty, it comes to Rs. 116. That is the average import price for the period. Your average selling retail price is Rs. 110-7-0 which means that on the face of it you were selling for a year at an average of Rs. 5 less than you were paying. This is presumably due to the difference in weight. You buy on the actual weight and sell on the nominal weight. I think that is the position.

Mr. Anandji.—Even that has ceased to be the position. It was the position a year and a half ago when the Continental manufacturers sold according to their actual weight, but now they have agreed to sell at a certain maximum theoretical weight per foot and if there is any excess, they forego the weight for that.

Mr. Mather.—If there is anything less than that, do you forego?

Mr. Anandji.—No.

Dr. Matthai.—Is it possible to make a general statement as to what would be the normal difference between the Calcutta the retail price and the landed price, taking some typical product?

Mr. Anandji.—About Rs. 7 to Rs. 8 per ton.

President.—Does this apply to beams or bars?

Mr. Anandji.—Only to bars or angles.

Landing charges.

President.—In this report so far as Continental steel was concerned, we took port dues, Rs. 2-8-0; landing, Rs. 5-8-0 and minimum allowance for profit, Rs. 2-8-0. That is to say, we added Rs. 10 to the c.i.f. price and then as regards British steel, we only allowed Rs. 5.

Mr. Anandji.—Why should there be any difference? I don't understand.

President.—Now we find that doesn't appear to be very satisfactory. One man importing British steel is allowed Rs. 5 and another man importing Continental steel is allowed Rs. 10.

Mr. Anandji.—There is something in that.

President.—I was thinking whether it would not do to make it Rs. 7-8-0 for all steel, whether it is Continental or any other steel.

Mr. Anandji.—Some distinction will be necessary for this reason. We find invariably that there is a certain amount of shortage of weight in Continental steel which we don't find in British steel. The suppliers say that if there is any shortage of weight we can get the Bengal Chamber's certificate from the jetties and send it on to them, but you will readily understand what amount of trouble and expense a man will have to undergo when he gets his goods weighed to get a certificate. For instance, there is a certain consignment of 100 tons to be weighed. The Licensed Measurers weigh the consignment at the rate of 7 or 8 tons a day and the weighment goes on for 12 to 14 days. In the meantime there is the heavy demurrage. The man cannot afford to keep the goods there and get a certificate. So, if he gets a certain margin for the shortage of weight, he takes his goods away so long as the shortage does not come to more than 1 per cent. But if there is a big shortage, he has got to get his goods weighed.

President.—Then, Rs. 10 may be nearly right.

Mr. Anandji.—I think so.

Mr. Mathias.—What is the amount of shortage as a rule?

Mr. Anandji.—It varies from 1 to 2½ per cent. I will give you a recent case where there was a shortage of 20 cwts. on a consignment of 70 tons. We wrote to the supplier and he sent us the actual weight tickets—they get the wagons weighed as they go out of the works. Still, there was the difference.

President.—The wagon weight was given.

Mr. Anandji.—They had them twice weighed.

President.—So long as you weigh only the wagon, you cannot get the correct weight.

Mr. Anandji.—That is what all works do.

Mr. Mathias.—The value of the shortage is only one to two rupees a ton.

Mr. Anandji.—Yes.

President.—Do you think that Rs. 10 is not too much if you have got to allow for the shortage?

Mr. Anandji.—You took Rs. 2-8-0 for port dues, Rs. 5 for handling charges and cartage to godown and Rs. 2-8-0 for importer's commission and thus made it Rs. 10.

President.—Yes, and so far as British steel is concerned, we thought that Rs. 5 would suffice.

Mr. Anandji.—When you talk of the importer's commission, do you take the commission which a bazaar merchant has got to pay to an importing house or do you take the profit of the merchant?

President.—The profit of the merchant.

Mr. Anandji.—Rs. 5-12-0 is the price for joists to-day. Now if a bazaar man wants to buy, he will pay somebody Rs. 5-14-0. Then, there will be his own profit when he sells.

President.—What we are trying to determine is what charges will have to be incurred by anybody importing steel before he put it on the market.

Mr. Anandji.—Then you are right.

President.—This is the price at which steel enters the country. After that you can do as you like. We have got to find out at what price foreign steel can enter the country and what charges must be added to the c.i.f. price to take it to the godown.

Mr. Mather.—If you take the c.i.f. and add Rs. 10 and the duty, that would represent approximately the price to the man who is actually going to sell to the retail buyer?

Mr. Anandji.—That will be the cost.

President.—That is what we are trying to find out. Do you think then that Rs. 10 is a reasonable figure to take?

Mr. Anandji.—Yes.

Mr. Mather.—Would it be necessary to add Rs. 2 for this shortage of weight you mentioned?

Mr. Anandji.—No. There is that margin of Rs. 2-8-0. Part of that will be swallowed up by the shortage in weight.

President.—That is to say, part of the shortage will be passed on to the consumer.

Mr. Anandji.—It is not possible to do that.

Mr. Mathias.—The Commission is reduced by the amount of shortage in weight.

Mr. Anandji.—That will be the case. This question of shortage will apply principally to bars. As regards joists, there is no question of shortage as they are sold according to fixed weight per foot.

Mr. Mather.—Do you mean that they will be sold as so much per foot on the basis of so many pounds per foot?

Mr. Anandji.—Yes.

Mr. Mather.—If the actual weight per foot is a little less it does not make much difference.

Mr. Anandji.—No.

President.—Do you think that Rs. 5 we allow for British steel is too little? British steel was imported at that time by big firms. They have got their works more or less on the river banks and they don't sell it to the bazaar.

Mr. Anandji.—The cost of handling may be smaller or may not be smaller. Take the case of having to send the goods to a certain siding. The charges come practically to the same amount as removing by carts or lorries. If you take over-side delivery, you have to take it by some boat to a jetty and it costs you a certain amount. The other day I took my goods from the jetty to a siding in Shalimar and it cost me the same as taking them by a cart.

President.—In Bombay, the importer will have to take it by cart in any case. He cannot take it by water.

Mr. Anandji.—Yes. The difference between British steel and Continental steel would be about Rs. 2-8-0, which would be due to the shortage of weight which we actually have in Continental steel.

President.—Do you think that Rs. 2-8-0 ought to be the difference between the two?

Mr. Anandji.—Yes.

President.—We have got prices sent to us by the Bombay Iron Merchants' Association. There I think Mr. Moolji Haridas is the principal man.

Mr. Anandji.—Yes.

President.—They have given us prices which are much higher. Against your Rs. 107-8-0 their price is Rs. 125 for joists. For beams when you were selling in March last at Rs. 100, they were getting Rs. 120. In one month, *i.e.*, January 1926, you were getting Rs. 100 and they were getting Rs. 145.

Mr. Anandji.—During the last 12 months, they were getting higher prices.

President.—What was that due to?

Mr. Anandji.—They have to pay a discount of Rs. 1-10-0 per Rs. 100 out of the selling price.

President.—That would not account for so much difference.

Mr. Anandji.—At the same time I think they were short of joists.

Mr. Mather.—This difference has persisted for 12 months.

President.—I suppose that Mr. Trivedi would represent that Association.

Mr. Anandji.—I think so.

President.—We shall ask him when he comes to give evidence. In your opinion, it is due to some shortage.

Mr. Anandji.—Yes, but still the difference appears to be very big.

Mr. Mather.—The difference is approximately the same as the difference between railway freight which Tata's would have to pay for delivery on to the Bombay market and delivery here. Do you think that that is really the controlling factor?

Mr. Anandji.—I don't think so because the price in Calcutta is not controlled by Tata's selling price for beams.

President.—There would be a difference of two or three rupees. In the previous month, *i.e.*, May 1926, your price was Rs. 134 and theirs was 140. That can be understood. In the next month your price was Rs. 120 but theirs remained at Rs. 140. The difference continued more or less and it went up Rs. 145.

Mr. Mather.—There was never a difference of less than Rs. 15 a ton.

Mr. Anandji.—The demand in Bombay for joists is generally smaller than in Calcutta. Therefore the stocks are much smaller there. If suddenly the demand comes, the price jumps up naturally.

Mr. Mather.—That might easily account for one or two months but not consistently for 12 months.

Mr. Anandji.—That is hard to explain.

President.—In the case of bars, the position is a bit reversed. In May 1925 you were selling at Rs. 145 and they were selling at Rs. 135.

Mr. Anandji.—With their discount on that, it would be Rs. 2 less.

President.—That is due to some special conditions in Bombay.

Mr. Anandji.—Yes.

Dr. Matthai.—The Bombay market is much smaller than the Calcutta market.

Mr. Anandji.—Yes, for joists.

President.—The difference between British prices and Continental prices in 1925 and 1926 is £1-16-6. That difference is very much greater now than it used to be in the pre-war days. We cannot tell yet. The point is that that difference has been more or less maintained throughout the period with a slight variation.

Mr. Anandji.—Yes.

President.—You start in 1925 with a difference of £2. In 1926 it comes down to £1-16-6, the drop in the British price is £1 and the drop in the Continental price is 17 shillings.

Mr. Anandji.—There was one big drop last year.

President.—In November it was £7-18-0 but in December it came down to £7-7-0. I think that is the drop you are referring to.

Mr. Anandji.—Yes, but to some extent the drop in the Calcutta prices was due to the good margin of profit in the previous months. If you took the figures for November and December it would be seen that there was a big drop of 12 annas per cwt. In November 1925 the price was Rs. 6, but in December it dropped to Rs. 5-4-0. People began to import heavily because there was a big margin of profit from May to November 1925, and then came the reaction.

President.—So far as quality is concerned, it is supposed to be the same as far as beams and other things are concerned.

Mr. Anandji.—Not in beams, because the buyers know that the weight is not what is sold to them and the strength per foot is not the same as of British joists. Therefore they pay a higher price for British joists. In fact nobody would buy joists for building purposes without consulting his engineer. The engineer would say that he wants certain strength per foot which he cannot get out of Continental joists.

Dr. Matthai.—Do you ever have Continental steel made to British specification?

Mr. Anandji.—The manufacturers are prepared to make that for a certain premium.

Dr. Matthai.—Have you any idea as to what the premium is?

Mr. Anandji.—About 10 shillings.

President.—They give a certificate.

Mr. Anandji.—Yes.

Angles.

President.—As regards angles, there has been a drop of 10 shillings.

Mr. Anandji.—Yes, to-day it is about £5-12-6.

President.—The difference between your price and the Bombay price of angles is not very great except in one month, *viz.*, February 1926, when your price was Rs. 128-7-0 and the Bombay price was Rs. 175.

Mr. Anandji.—I don't think that the Bombay price is the normal price. It might be for certain sections. I was wondering whether they had given the highest price realised in that month.

President.—Do you give the average figure?

Mr. Anandji.—Yes.

President.—That may perhaps account for it to some extent.

Mr. Anandji.—I think so.

President.—Otherwise there is not very much difference between your price and theirs.

Mr. Anandji.—No.

President.—All the same their prices are higher than yours.

Mr. Anandji.—The complaint has been that they have been realising lower prices in Bombay than in Calcutta.

President.—So far as the Bombay import prices are concerned we have got Messrs. Richardson & Cruddas' prices and those of Messrs. Geo. Service and Company. They are not higher than yours, the difference being only about half a crown.

President.—Even at your lower price you had a good margin in the case of angles?

Mr. Anandji.—There was a good margin of profit in angles.

President.—It is about a rupee a cwt.?

Mr. Anandji.—Yes, sometimes.

President.—In bars there has been more or less the same drop, about 16 shillings, between June 1925 and May 1926?

Mr. Anandji.—Now the price is £5-12-6 for bars.

President.—What is the bazaar price?

Mr. Anandji.—Bazaar price has not much changed; it is nearly the same as we gave for last month—about Rs. 130.

President.—There also you have a fairly good margin.

Mr. Anandji.—Not a big margin.

President.—£5-12-6 is exactly Rs. 75?

Mr. Anandji.—But the goods we are at present getting are not worth £5-12-6, we are probably getting goods of February or March shipment. These goods we shall have three or four months later.

Mr. Mather.—These sterling prices you gave us for individual months are the prices at which you booked orders for that month?

Mr. Anandji.—Yes.

President.—They will be current during the next three or four months?

Mr. Anandji.—Yes. Since the last three or four months the market has been working at a loss.

Dr. Matthai.—Is that so generally at this season of the year?

Mr. Anandji.—It is not always so. I suppose you have got the figures of imports of bars into Calcutta for the last few months. In March it went up to 6,000 tons a month, in April 4,300, May 6,700 again—a very heavy quantity.

President.—What is this increase due to?

Mr. Anandji.—There was a big shortage in the market in December and January and the demand was good, and at that time Tata Iron and Steel Company were not willing to sell to this market and people thought there might be scarcity and they bought.

President.—In bars also the gap between British and Continental is more or less maintained. In 1925 there was a gap of £1-17 and in 1926 £1-13, though, I think, in 1924 the gap had become very big—I think it was £3—but after that I suppose the British manufacturer realized that he could not allow the gap to remain so big if he had to compete against the Continent.

Mr. Anandji.—I don't think he is really competing because in India his market is assured to some extent.

President.—We have plenty of evidence now that except where the engineering firms have to use British Standard Specification steel they use more Continental material than before. In our earlier enquiry the position was that British steel was not seriously in competition against Continental steel, but in June 1924 the gap was becoming so big that unless the British steel manufacturer reduced the prices, British steel would have to had go out of the market. Then in our last enquiry we found that the gap had become smaller. I think that is roughly the position.

Dr. Matthai.—Is there any British steel at all now in the bazaar?

Mr. Anandji.—None except joists.

Dr. Matthai.—What was the position last year?

Mr. Anandji.—Practically the same. Of course the stock this year is a little bigger than last year and there may be bigger stock of British joists also in the country.

Dr. Matthai.—Was there ever a time when there was a considerable amount of British steel in the bazaar?

Mr. Anandji.—No. If as you point out the engineering firms are giving up.

President.—Not giving up; they use it where they can. Unless they are compelled to use that steel they won't do it. In fact even the railways are doing the same thing owing to the difference between the two prices; they have been buying rails from the Continent. You yourself said that the Tata Iron and Steel Company had to reduce their price in order to compete against some of the Continental steel when they found that the engineering firms were inclined to use Continental steel wherever possible.

Mr. Anandji.—I think the reduction in Tatas' prices is having an effect on the British prices also.

Mr. Mathias.—Do you consider that there is regular competition between Continental steel and Tatas steel in the bazaar?

Mr. Anandji.—Yes, there is.

Mr. Mathias.—I understood you to say that the supply was entirely from the Continent and that the Tata Iron and Steel Company did not compete?

Mr. Anandji.—If you take the Calcutta market, the bazaar has got to depend on other bazaars which buy from it. Calcutta has got to depend on Cawnpore, for instance, and also on other bazaars which buy from it. If you take all these bazaars together there is undoubtedly competition between Tatas steel and Continental steel. There is no doubt about that. In fact they are the only competitor of Continental steel and that is what checks and controls the supply of Continental steel in India. If you take the Calcutta market by itself, Tatas try to control this market from time to time and sometimes give it up. When they give it up people find prices going up and they want to buy something. A dealer has got to keep a certain stock to keep his customers and he starts importing. Then after, say, three months Tatas find they have not got sufficient orders and they come back to the Calcutta market.

Mr. Mathias.—Do I understand you to say that Tatas by underselling the Continental material establish what is practically a monopoly for their own material, say, for three or four months?

Mr. Anandji.—Yes, on the markets which depend on Calcutta they do that.

President.—What I think happens is this. Tatas would ordinarily compete against the British manufacturer for the better class of steel but when they find that the British manufacturer has to compete against Continental steel and therefore to reduce his price, Tatas have got to do the same in order to compete against the Continental as well as the British steel. Is that not the position? When the Continental steel began to come in at a difference of £3 the position was that the British manufacturer was losing ground; then he saw it was no good losing ground and he began to cut down prices so Tata had got cut down their prices also to compete against Continental steel.

Mr. Anandji.—If you take the actual figures of import you will not find that the import of British material has increased on account of the cutting of prices. I don't think their imports to India have increased.

President.—But they have not disappeared. The engineering firms would buy when there is a difference of 30 shillings but when it comes to £3 they would not.

Mr. Anandji.—He only cares for certain sections; his buyers have not increased by cutting prices. He would not lose those buyers if he had not reduced the prices. That was the position in 1925.

President.—Then they seriously began to think that their prices must come down?

Mr. Anandji.—That may be the case to some extent but the competition of Tatas is undoubtedly against Continental steel in the Northern India markets, in the Central Provinces and in South India where they go a little further down beyond the Bengal Nagpur Railway.

Mr. Mathias.—Beyond this limit the competition is against British material I suppose?

Mr. Anandji.—Yes.

Mr. Mathias.—Then the steel with which Tatas compete is not necessarily of the first class standard?

Mr. Anandji.—It need not be.

Dr. Mathias.—There are buyers for their second class material which may be in some way defective?

Mr. Anandji.—They sell these as untested.

Mr. Mathias.—Would you say that the competition is between Tatas first class material and the British stuff and Tatas defective material with Continental?

Mr. Anandji.—Not defective but untested. But all untested steel is not necessarily inferior.

Mr. Mather.—You have no guarantee, that is all?

Mr. Anandji.—That is so. As regards joists the quantity imported into Calcutta in February was 7,500 tons and in March 4,700 tons—a very huge quantity.

Mr. Mathias.—What was the reason for that?

Mr. Anandji.—There were high prices ruling for some months here and people were buying heavily. Continental prices were falling and that was an inducement for the people to buy.

Mr. Mathias.—Do you think there is a chance of the market being overstocked?

Mr. Anandji.—It is at present overstocked, of course partly due to the riots we had here, the demand has been affected to a certain extent; then again these riots have created financial stringency which is another factor which makes for lower prices.

President.—But there is not the speculative element that was there in 1923-24 in anticipation of the Tariff Board's report?

Mr. Anandji.—Not this time.

Mr. Mathias.—You do not think that these heavy imports in January were due to the impending legislation in regard to protection which came on in February?

Mr. Anandji.—There was no talk about that in the bazar because people knew that Tatas were going to get some help from Government.

Plates and Sheets.

President.—As regards plates, you give them under two descriptions, and there also the gap has remained exactly the same between British and Continental, £2 in 1925 and 1926, and therefore I think the prices have dropped more or less in the same ratio. Do you import much Continental plates?

Mr. Anandji.—Yes.

President.—There also you don't get very good prices?

Mr. Anandji.—For $\frac{1}{8}$" prices have been very bad.

President.—Even taking £6-5-0 for $\frac{3}{16}$ it comes to Rs. 38-13-0 and you get Rs. 110. Is that because there was too much stock and no demand?

Mr. Anandji.—That is so.

President.—Still Bombay has been doing very well in plates?

Dr. Matthai.—Is there any complication in connection with plates about short weight?

Mr. Anandji.—Yes, the same complication as in bars.

Mr. Mather.—So that you think on the top of the c.i.f. price and the duty somewhere about Rs. 10 ought to be added to allow for short weight, landing charges, importers commission and so on?

Mr. Anandji.—Yes.

Mr. Mather.—In that case your average selling price for $\frac{1}{8}$ inch plates for the last 12 months would work out to about Rs. 139, whereas your average actual selling price only comes to Rs. 137-8-0, so that for the whole year you have been selling rather at a loss, on that basis?

Mr. Anandji.—Yes.

Mr. Mather.—Has the plate market been so depressed for the whole of that year?

Mr. Anandji.—Exceptionally bad for the last six or seven months.

President.—For which quality there is a bigger demand—$\frac{1}{8}$" or $\frac{3}{16}$" in your business.

Mr. Anandji.—$\frac{3}{16}$" had a bigger demand. Now I think that is all supplied by Tatas.

President.—What is $\frac{1}{8}$" used for?

Mr. Anandji.—For making Kadais, tavas, etc.

President.—$\frac{3}{16}$" would be for structural work.

Mr. Anandji.—Yes, and small safes. In Delhi and other places $\frac{3}{16}$" to $\frac{5}{16}$" plates are used for making pans for boiling sugar-cane juice. They get them dished.

Dr. Matthai.—$\frac{3}{16}$" would never be used for building purposes.

Mr. Anandji.—No. Most of the tanks are made of galvanized sheets of $\frac{1}{16}$".

President.—Then as regards black sheet the difference between the British and Continental has remained more or less the same. According to your figures the difference is very high—a difference of about £3 in one case.

Mr. Anandji.—Between whose prices?

President.—Burn and Company's price and yours.

Mr. Anandji.—They have got steel sheets $\frac{1}{8}$". Are you referring to them? I think their price is a little higher.

President.—Yours is £8-5-0 against £8. Burn and Company's are $\frac{1}{8}$" plates.

Mr. Anandji.—Yes.

President.—Your £11-5-0 is for what gauge?

Mr. Anandji.—14 to 20 gauges.

Dr. Mâtthai.—How many inches would that be?

Mr. Anandji.—14 gauge will be little thicker than $\frac{1}{16}$". 18 gauge will be a little under that.

President.—There also you have not got a very big margin.

Mr. Anandji.—No margin. There is a loss.

President.—Rs. 120 is your c.i.f. price.

Mr. Anandji.—Yes.

President.—There will be a loss of about Rs. 5.

Mr. Anandji.—The sheet market has been worse than the market for $\frac{1}{8}$" plates. All the year round there has been severe pressure from the Tatas Steel Works. They have had to reduce their prices three or four times during the last 12 months.

President.—In black sheets.

Mr. Anandji.—Yes. At one time their price was Rs. 155. Immediately after that it dropped to Rs. 138.

President.—As regards galvanized sheets, the price has been more or less steady until last month.

Mr. Anandji.—Yes, there was a fall going on up to last April.

President.—In July 1925 they were £17-2-6.

Mr. Anandji.—Yes.

President.—And they rose to £17-17-6 in November. I think that was the highest price that they reached.

Mr. Anandji.—Yes.

President.—Then they came down to £17 in April 1926.

Mr. Anandji.—The March figure was the lowest.

President.—£16-13-9.

Mr. Anandji.—Then of course came the strike and the prices went up. As a rule the price of galvanized sheets always goes up in July and continue steady or with a higher tendency up to December. Then it gradually begins to ease off until about March or April.

President.—What is it due to?

Mr. Anandji.—Due to the demand.

President.—I should think that in March the prices should go up because it is just before the monsoon.

Mr. Anandji.—Goods will not be able to reach here in time. For Calcutta the best shipments to buy are September and October. They are the biggest shipments. After that they buy for December, January and February and then the imports fall off. A small quantity is bought in June.

President.—I take it that it is in the up country that you sell most.

Mr. Anandji.—Eastern Bengal.

President.—Tea gardens?

Mr. Anandji.—Yes, and jute districts.

President.—For building houses?

Mr. Anandji.—Yes.

Dr. Matthai.—You don't get any of them from the Continent.

Mr. Anandji.—Continental makers have started selling. British price was 16-13-9 and their price was 16-5-0.

Dr. Matthai.—How long ago was that?

Mr. Anandji.—They started coming into the market in March-April. They were in the market at least once before, but they were not regularly supplying. Since March they have come into the market and they are selling up to 500 tons a month.

Mr. Mathias.—Can you tell me whether the British black sheet is in competition with Continental black sheet?

Mr. Anandji.—For thicker gauges, there is.

Mr. Mathias.—Why I ask you is because I find in these returns which we asked for from various people, they give no returns at all for British black sheet, and it occurred to me that very little was coming into the country.

Mr. Anandji.—Up to 20 gauges very little black sheet. Over 20 gauges there is competition between the British and Continental. Over 24 it is all British.

Mr. Mather.—The thinner it is the bigger is the proportion of British sheet.

Mr. Anandji.—Yes. There are 16 sheets in a bundle weighing 84 lbs.

President.—Are these British galvanized sheets corrugated or plain?

Mr. Anandji.—Both corrugated and plain.

President.—What gauge?

Mr. Anandji.—24 gauge which is the standard gauge.

Dr. Matthai.—Where does this Continental corrugated sheet come from? Is it from Belgium?

Mr. Anandji.—I think so. I think their chances of competition will increase: They started selling 100 tons and now they have come to a regular supply of 500 tons a month. When you started your first enquiry in 1923 there were no Continental sheets manufactured at that time.

President.—There has been a steady increase in the demand for corrugated sheets in the last two or three years.

Mr. Anandji.—Yes.

President.—Do you think that the increase will be maintained.

Mr. Anandji.—It depends upon the conditions of trade in Bengal.

President.—Chiefly it will depend upon the crops.

Mr. Anandji.—Yes and to some extent upon the price of galvanized sheets.

Mr. Mather.—Do you think that that market is more sensitive to price than the market for other steel?

Mr. Anandji.—I think so. Owing to the very high prices after the war, the demand from Eastern Bengal was very very small. Bengal could hardly take 3,000 or 4,000 tons a month. Bombay at that time took 6,000 or 7,000 tons. The highest price reached was £60. Bengal could not buy then.

Mr. Mather.—If there was a rise of £2 to £3, do you think it would affect the market?

Mr. Anandji.—I think so. If the price goes over Rs. 15, the demand would fall considerably.

Mr. Mather.—Rs. 15 a cwt. is the limit in price at which you can sell in any substantial quantities?

Mr. Anandji.—Yes, but if the demand had started for a considerable quantity and then the price went up, they would probably continue to buy. If the price were much higher than Rs. 15 for a longer period, the demand would fall off.

Dr. Matthai.—If you go on buying at the rate at which you have been buying—duty or no duty, there might come a reaction. After all your requirements for galvanized sheets are not like the demand for piecegoods. There would come a time when you might be adequately stocked.

Mr. Anandji.—It cannot be so elastic as the demand for piecegoods, but still there is a certain amount of wear and tear and loss even in galvanized sheets. They get floods in Eastern Bengal and cyclones, etc.

Dr. Matthai.—During the war as a result of prices, it was very difficult to get galvanized sheets and requirements were left unsatisfied. They are now being satisfied, so that there is bound to come a time, whatever the price may be when the demand would fall off. Don't you think that there is something in that?

Mr. Anandji.—There is something in that. We are still far from those conditions. At the same time for some years to come the demand will be a strong one. Take for instance the demand for housing. Houses are being built every year. The demand for housing still continues all over the country.

Mr. Mather.—Do you anticipate the continuance of a good market for galvanized sheet provided the price does not go much above Rs. 15?

Mr. Anandji.—The lower the price the bigger will be the demand for some time to come. Of course the communal troubles will affect the demand to some extent. They have already affected the price of jute. It has fallen in the interior and if this tension continues, there will be a further fall in the price.

Dr. Matthai.—The fall in the price of galvanized sheet has coincided with good monsoons for three years.

Mr. Anandji.—In Bengal there is not much trouble about monsoon. They have got a huge river system which supplies water, the complaint about monsoon affects Western India considerably, but here it is not the case. The fall in price coincided with very big prices for jute—exceptionally high prices last year though of course all these heavy prices have not been realised by the growers of jute. It is the middlemen who get the benefit of those prices.

Dr. Matthai.—It is the middlemen who buy galvanized sheets.

Mr. Anandji.—The ultimate consumers are the growers of jute.

Fluctuations in the prices of Continental Steel. How to protect Indian steel from Continental competition.

President.—We were talking a little while ago about these frequent changes in the prices. Have you any suggestions to offer as to how the prices may be stabilised in the country. It would be very convenient both for you as well as for the consumer, if you knew what price you had to pay for steel. So long as these Continental prices fluctuate, that is not a very easy proposition, is it?

Mr. Anandji.—It is next to impossible.

President.—The only other alternative is to stabilise your own price, that is to say the price of Indian steel. Supposing it was done like this: In our enquiries we first of all have to determine what ought to be the fair selling price of Indian steel. For this purpose first we find the works costs and then add to them an allowance for overhead and profit. The total figure represents the fair selling price. Supposing that figure was fixed—say for 5 years or 10 years—and it was provided that during that period that was the price which the Indian manufacturer was to get. We then took say to-day's price and fixed the difference between these two prices as the duty and then if we found that the foreign price had changed, we put on an additional duty, but the Indian price would remain the same. Do you think that would help to stabilise the prices in the country?

Mr. Anandji.—I think that is the best solution. If we had definite protection for a certain number of years, that would go a long way in preventing the Continental manufacturers from cutting their prices. I am not prepared to disclose in my public evidence how Continental manufacturers have been trying to capture the demand in Calcutta, but they have been doing that by indirect means and if that is stopped—if they are given to understand that whatever reductions in price they make, they are not going to have more than a certain amount of the demand in India into their hands—it would go a long way to help the Indian industry.

President.—Of course you know there is this complication of Continental exchanges. We shall come to that presently. Leaving that aside, supposing we say that the Indian manufacturer sells his steel at Rs. 140, just as an instance, and supposing foreign steel comes at Rs. 120, we say that the duty is Rs. 20. Next year it comes at Rs. 105 and the duty would be Rs. 35. So far as you are concerned, if you want to buy steel, you have got to pay Rs. 140. Even if the duty has to be changed, in order to adjust it to the foreign price, it would not be such a hardship because you know that you have got to pay Rs. 140 if that is the price fixed. Steel cannot be sold under Rs. 140 in this country.

Mr. Anandji.—Of course, as an ideal it is a good thing.

President.—I am asking you as a practical man. If we are to do that, I want to know how as a practical man you would look at it. Supposing every year Government says "Last year steel came in at such and such a price. In the following year we will adjust the duty to that price," do you think that it would seriously interfere with the business?

Mr. Anandji.—It would not if it could be done equitably. But I am afraid it could not be done equitably under the system of varying duties.

President.—It would be like this. The Indian price is fixed at Rs. 140. To-day the import price is Rs. 120. The duty throughout the year will be Rs. 20.

Mr. Anandji.—In the first place you cannot arrive at the import price. How do you know that everybody's import price is Rs. 120?

President.—There are so many people importing and we can get it from them.

Mr. Anandji.—Even to-day everybody is not importing at the same price. Then, there is another thing. If you had that sort of thing, somebody might find means to import at a lower figure.

President.—An average will be taken next year. If the average price has dropped by Rs. 10, then the duty will go up by that amount.

Mr. Anandji.—A lot of harm will have been done in the meanwhile.

President.—That will happen in any case. The point is that if we fixed the duty for a longer period it would be worse still. We want to protect the consumer. Supposing the price went up to Rs. 160, Government would say "The duty goes." The Indian consumer will then be able to buy at Rs. 140 all through or the world price whichever is greater.

Mr. Anandji.—Your suggestions seems to be this that you want the duty to be levied on the invoice price. Is that your idea?

President.—It may be fixed for a period. It is subject to revision after that but not on each invoice.

Mr. Anandji.—It may be fixed for a period.

President.—One year may be the period.

Mr. Anandji.—That is what has been happening in the past. It has not checked the fluctuations.

President.—But the duty was fixed in such a way that no allowance was made for fluctuations in prices. Supposing an allowance is made in the price of Rs. 140 that we fix, by which the industry is able to meet fluctuations of say Rs. 5 or Rs. 10, then there is no question of alteration?

Mr. Anandji.—I am afraid you will not be able to cure the evil which is at the root of this situation.

President.—What is that?

Mr. Anandji.—The Continental manufacturers so far as I can see are in desperate need of getting orders and therefore they must cut their prices any how to get orders. So far as I understand at present they don't sell in their own currency because that will mean the exploitation of their own country. So, they sell in sterling. Probably it is the Continental makers who pocket all the profit. They buy their raw materials in francs. They pay their wages in francs and they don't pay wages even in proportion to the depreciation of the currency. I do not know how far their Governments share the profit. Really speaking if they followed the depreciation in the exchange, they could have cut their prices considerably. I know in 1921 I had an invoice of German steel worth £3 when the price was £8. But they say that it meant the exploitation of their own country. Therefore they would only cut their prices to such an extent as would bring them more business. The best remedy in my opinion would be to tell them definitely that they are not going to have more than a certain amount of business here. That might be done either by anti-dumping legislation as the Indian Chamber advocated—I had a hand in that—or it might be done by having Imperial Preference but I do not know what the politicians would say about that.

President.—I am coming to that. I was dealing with the question apart from that.

Mr. Anandji.—You are on the question of fixing the price.

President.—We are fixing the basis of protection. We are not fixing the price. We must get the fair selling price in order to get the proper amount of protection, which is the difference between the foreign price and the local price.

Mr. Anandji.—That threat was held out to the foreign suppliers when the 1st Act was passed. You recommended in your first Report that it would be necessary to give additional protection if the prices went below a certain level. Then, you made a second enquiry and you found that the evil was incurable.

President.—For such an emergency Government may step in at any time.

Mr. Anandji.—That will only be encouraging speculation if the occasion for stepping in by Government is not to work on certain definite principles.

President.—There are two ways as you have rightly pointed out. The first is the imposition of anti-dumping duties by which you mean that wherever there is a depreciated currency this anti-dumping duty should be imposed, but that will have to vary from time to time.

Mr. Anandji.—Yes.

President.—Do you think that there would be no practical difficulty in doing that?

Mr. Anandji.—There may be some practical difficulty.

President.—Do you think that it should be done?

Mr. Anandji.—Yes, it should be done. The penalty or the duty against the depreciated currency should be so heavy that it would be practically impossible for goods from that country to come in.

President.—What would happen if the British steel came in? There cannot be any anti-dumping duty against British steel?

Mr. Anandji.—I think that that is the only practical solution of the difficulty.

President.—That is to say, you want to fix the protection with reference to the British price and then as regards Continental steel, there should be an anti-dumping duty against that so that it would become impossible for the Continent to undersell. That is what you mean.

Mr. Anandji.—Yes.

President.—Do you think as a practical man that this competition cannot be stopped otherwise?

Mr. Anandji.—I think there is that danger.

Mr. Mather.—As an importer of Continental steel you would not object to a proposal which had the effect of definitely restricting your Continental steel, provided of course you get other steel to sell?

Mr. Anandji.—As a trader I would like to have the trade in my hand and I don't mind whether it is Continental or British steel.

Mr. Mather.—You don't consider that it would disorganise your business so much as to make it impossible for you to carry on if there was a differential duty?

Mr. Anandji.—No.

President.—You will be getting British steel instead of Continental steel. You will be in a better position. The price will be more or less fixed. There will be no complication of the exchange and other things.

Mr. Anandji.—At present the price of the Continental steel is paid in sterling.

President.—For instance, Germany is creating this big trust. That must have some effect on prices. How is that to be met except by anti-dumping duties?

Mr. Mathias.—Do you think that it would cause any hardship to poor consumers of steel if Continental steel were excluded? You say there is a big sale of steel of inferior quality in the bazar. If the price of Continental steel were raised to the level of British steel, do you think that it would cause any serious hardship to the poor consumer?

Mr. Anandji.—The disadvantage will be that the consumer will not be getting that extra low price that he is now having for Continental steel on account of the depreciated exchange. He would not have the benefit of depreciation. That is the only disadvantage.

President.—That is a temporary disadvantage.

Mr. Anandji.—Yes. If you take the general price level, *i.e.*, the index number, you will find that the prices of steel with the protective duty are about the same as the index number of cost of living. The index number is about the same, or a little lower than the cost of living index number.

Dr. Matthai.—That is really proving that the protective scheme has failed. If the index number does not show a different tale, it simply means that the protective duties have failed in their object.

President.—If instead of bounties we had duties, the prices would have risen.

Mr. Anandji.—Yes.

President.—The position is this that the bounties were intended to meet a particular situation. That situation went on changing. If the bounties had been increased in proportion, it would have been all right. But they could not be increased in that proportion because bounties mean paying out cash and require the sanction of the Legislature and various other things. Supposing anti-dumping duties had been levied as it was originally intended, the duty on Continental steel would have gone up.

Mr. Anandji.—Yes.

President.—And the prices would have more or less remained the same in the country.

Mr. Anandji.—The prices would have gone up in the country.

President.—The idea was that prices would remain at a particular level. Last time we said that it should be Rs. 180. When the prices dropped we should put an additional duty and bring them up again to Rs. 180. That was the idea. If that had been done, there would have been no occasion for any bounties at all.

Mr. Anandji.—That is true.

President.—Some of the difficulties might not have arisen.

Mr. Anandji.—They would have arisen all the same.

President.—Every time the price comes down you put it up by anti-dumping duties. Where the last scheme failed was that it was not possible for Government to take that action immediately.

Mr. Anandji.—Bounties are advantageous in that respect and they are not an unmitigated evil. They are an advantage in this respect that the profit or the income to Government by taxing steel is returned again to the manufacturer of steel for the benefit of the industry in the country.

President.—The result of the bounty was that it enabled Continental steel to come in. If there had been a duty, it would have shut out Continental steel.

Mr. Anandji.—Probably the imports of Continental steel would have been lower by a few thousand tons.

President.—And more British steel would have come in. Supposing you put anti-dumping duties, what happens. Let us suppose that the price of British steel was Rs. 120 and that of Continental steel Rs. 100. The duty was Rs. 40 on all steel. The British price went up to Rs. 160 whereas the Continental price remained at Rs. 140. When the price of Continental steel dropped, if a further duty had been put, the proportion would have remained the same. As it was not put, the proportion got absolutely changed.

Mr. Anandji.—The original scheme was for levying the same duty on all steel.

President.—When we reported first, there was not much difference between the Continental and British steel. At that time Tata's steel was competing more against British steel than Continental steel. Soon after that the prices of Continental steel began to drop and if additional duties had been imposed on Continental steel, the ratio would have been maintained and British steel would then have been able to compete against Continental steel. What happened was that the British steel went out and the Continental steel took its place. That was how the imports increased. Is not that so?

Mr. Anandji.—I cannot agree with you there. Take the figures.

President.—Yes. When we reported the difference between British and Continental steel was a few shillings and therefore we put the same duty. What happened? Within four or five months the difference became £2 to £3.

Mr. Anandji.—What you want is the comparative position of British and Continental steel in regard to imports.

Dr. Matthai.—Yes, in regard to each product.

Mr. Anandji.—Yes.

Dr. Matthai.—We want to know the relation between British and Continental imports.

Mr. Anandji.—If you have that, it can be seen how far Continental steel has captured the demand for British steel.

Dr. Matthai.—Supposing we had a scheme fixing a fair selling price of Rs. 140. To-day the c.i.f. price is Rs. 120 and the duty is Rs. 20. Next year the c.i.f. price goes down to Rs. 110 and the duty goes up to Rs. 30. If I am an importer I might show my price as Rs. 120 and not Rs. 110.

Mr. Anandji.—That is what I say. There will be room for tampering with invoices and at the same time you will be adding speculation in the country. People will say that as the duty will be going up in three months, they will buy beforehand and keep the goods in the country. Continental Banks will be prepared to advance money for that.

President.—If only an anti-dumping duty is put, the prices in the country would remain the same.

Mr. Anandji.—If you are going to revise the tariff only at fixed times, there will be room for speculation. If as we say in the memorandum of our Chamber, you have a permanent body to alter the duty any time, then there would be no inducement to speculate.

Dr. Matthai.—If it is said that every March the duty will be revised, everybody would organise for speculation.

Mr. Anandji.—Yes.

President.—We don't mention the time when the anti-dumping duty may be imposed. Our idea is only to maintain the price at Rs. 140 in the country. What inducement is there in that case to any man?

Mr. Anandji.—So long as there is a danger of the duty being imposed any time, there would not be speculation.

Mr. Mathias.—On the other hand if the duty was imposed suddenly without any warning, would it not cause considerable hardship?

Mr. Anandji.—It is bound to cause extraordinary hardship particularly when a man buys his goods on credit.

Mr. Mathias.—Would it not be very difficult for a merchant to conduct his business if he did not know from time to time what the duty was going to be?

Mr. Anandji.—Yes, that is true. But if the price were fixed, so long as he knew that the invoice price was not much below that, he would not stand much risk of the duty being imposed. The difficulty is that you cannot be guided by the invoice price. If you are guided by the invoice price, then the invoice will be tampered with. If you are not, something might happen later on and duty might be imposed on certain of his goods.

Mr. Mathias.—I did not quite gather whether you consider that there is a permanent difference between the British and Continental steel in price?

Mr. Anandji.—There is always a difference.

Mr. Mathias.—If you were to put on such a duty as to equalize the prices of British and Continental steel or Tatas steel, would it not be doing an injustice to the consumer of Continental steel by preventing him from getting Continental steel cheaper?

Mr. Anandji.—That any scheme of protection would do.

Mr. Mathias.—There is a disparity in quality between the British and Continental of about 10 shillings which will always be there. There is a class of consumer who will always want to use Continental steel and if you say he must use better steel he will be at a disadvantage.

Mr. Anandji.—The man who uses inferior quality of steel is not much concerned about the quality. In fact he is not aware of the existence of the other quality.

Mr. Mathias.—You don't think there will be any hardship?

Mr. Anandji.—So far as the consumer is concerned that hardship would always be there in any scheme of protection because the hardship will fall on the merchants and that will re-act upon the consumers. In fact any scheme you suggest of anti-dumping legislation is bound to create dislocation of trade.

President.—But after the anti-dumping duties have been levied the foreign manufacturer might realize that it was not safe to dump. He may send in one or two cargoes but he won't go on indefinitely?

Mr. Anandji.—Import trade is necessary for India; India has got to import certain amount of steel and this would make import very difficult.

President.—If the country decides to give protection to the Steel industry then it must take every step that it reasonably can to make it effective.

Mr. Anandji.—Could not some scheme be devised whereby the income from protection can be increased and kept in reserve to be paid as bounty, as the prices varied, to the Indian manufacturer?

Dr. Matthai.—If there is any variation, protection ought to take the shape of bounties?

Mr. Anandji.—I think that will be a better plan.

President.—We would simply be paying a bounty in order to meet the position created by the depreciated exchange.

Mr. Anandji.—You provide for that initially by levying heavier duties and keeping that money in reserve and then vary the duty from time to time as the prices vary. That will cause less dislocation than alteration of duties from time to time.

President.—That will be a very difficult thing to administer.

Mr. Anandji.—That is likely to cause less dislocation in trade.

President.—Why should there be very much dislocation if a man knows that if he imports his steel below a price fixed by the legislature he is liable to pay increased duties?

Mr. Anandji.—What can he do? Every merchant is bound to buy at the lowest price, that will be his endeavour at every time. Supposing somebody is selling at Rs. 120 and another man at Rs. 110. Why should I buy from the man who is selling at Rs. 120 if I can buy for Rs. 110? In fact if you suggest that every man must buy, say, 10,000 tons at Rs. 110 there is an extra profit of Rs. 10 a ton.

President.—They have this anti-dumping legislation, practically in every country except Great Britain; in the United States of America, in Canada, in Australia, South Africa and Japan. The same question arose there; it is an evil which has to be met.

Mr. Anandji.—When we are going into that question we must also look at the conditions in different countries. For instance the United States have not got to depend so much on foreign supplies as we have to depend. To them foreign trade cannot be such a necessity as it is to us. They can do without foreign steel but we cannot probably.

President.—This will not necessarily stop foreign trade in steel.

Mr. Anandji.—It will cause huge dislocation.

President.—You simply do not deal with countries which are liable to anti-dumping duties. If you deal with the United States or England you do not run that risk.

Mr. Anandji.—Then why not prohibit imports altogether?

President.—In effect that must be the position if this dumping is to be stopped. Instead of saying you forbid importation you say that the duty would be so high that it could not come in. Supposing that is done why should there be dislocation of business when we can get steel from countries where the exchange is stabilized?

Mr. Anandji.—The difference will have to be so great between the duties on goods coming from the two countries that there is bound to be a big hue and cry in the country.

President.—That is a different matter; we are only concerned with the economic aspect of the question.

Mr. Anandji.—At the same time you should have to make the difference between the duties very great it should have to cover itself against additional falls in prices in those Continental countries.

President.—Supposing we do that?

Mr. Anandji.—Then it is possible.

Mr. Mathias.—I thought you recommended anti-dumping duty?

Mr. Anandji.—That will be a good solution of the difficulty, but if we look to the practical aspects of it, anti-dumping duty will have to take the shape of different duties on the goods of two sets of countries.

Mr. Mathias.—Do you think there are practical difficulties in the way? The reason why I am asking this is, that I am not quite clear in my mind whether you are in favour of anti-dumping legislation or against it because you give your arguments in both directions?

Mr. Anandji.—I put my argument forward as it strike me, and the best solution I suggest is the fixing of a duty which would leave sufficient reserves in the hands of the Government of India to vary the bounty from time to time.

Mr. Mathias.—Are you in favour of anti-dumping legislation?

Mr. Anandji.—Yes. It should at present take the shape of giving the Government of India a big income sufficient to give bounties to Tatas from time to time from the additional duty. Supposing the Government of India makes 10 crores of rupees more profit out of the additional duty; keep that money in the hands of the Government of India and ask them to pay to Tatas from time to time whatever is necessary looking to the variations in prices.

Mr. Mathias.—When anti-dumping is effective you will get no revenue?

Mr. Anandji.—There will then be no need to give anything to the Tata Iron and Steel Company.

President.—There is one other difficulty. Supposing you put a very heavy duty, then Tatas will naturally raise their price up to the full amount of the duty. In that case there is no occasion for any bounty at all?

Mr. Anandji.—No. If Tatas can raise their price then there will be no need for additional bounties to them. To-day they need a certain amount of further protection.

President.—It is only if you put the same amount of duty on British and Continental steel that Tatas can raise their prices, but if you have two different duties Tatas cannot raise the price above the price at which British steel is coming in. For example, take our price at Rs. 140, British Rs. 120 and Continental Rs. 100. If you put Rs. 20 on British and Rs. 40 on Continental they can all compete. But if you put a duty of Rs. 40 on all steel then the price of British steel goes up to Rs. 160 and it is governed by the price of continental steel in the country whereas if you keep the differential duty it may be governed by the price of British steel because if the price of Continental steel drops to, say, Rs. 99 you put a duty of Rs. 45.

Mr. Anandji.—You have to-day, say, Rs. 120 for British and Rs. 100 for Continental. Now you levy the additional duty of Rs. 40 on Continental steel. If the Continental manufacturer reduced his prices this additional duty will put into the hands of the Government of India sufficient money to pay to the Steel Company for any further fall in price.

President.—If you have it in that form then the Government can derive no benefit.

Mr. Anandji.—If the Government derive no benefit there will be no need for them to pay anything to Tatas; only when the Continental price goes down that they get more duties.

Mr. Mather.—Is your position something like this, that you would favour two rates of duty, one for countries with depreciated exchange and the other for other countries. Having got that initial special duty you would but keep the receipts from it in reserve with the Government of India in order to meet any future variations in price by means of bounties?

Mr. Anandji.—Yes, keep sufficient money in the hands of the Government of India to meet any variation. That will cause less dislocation of trade and will meet the needs of the Indian industry. I will make the point more clear. We start with the supposition that the present British price with the present duty will enable Tatas to carry on under present conditions. That is our initial supposition. Then there is the basic duty of Rs. 40 per ton which we now have; over and above that there shall be a duty of, say, Rs. 20 a ton which we shall call the anti-dumping duty. The proceeds of the anti-dumping duty shall be kept apart by the Government of India for payment to Tatas whenever the price level in the country falls below what is remunerative for the Indian industry. Now, if the present rates make British prices competitive and only British steel begins to come into the country, there will be no income from this anti-dumping duty and there will be no need to pay anything to the Steel industry.

President.—But supposing the prices drop, then where is the additional money to come from?

Mr. Anandji.—If the Continental prices drop then the amount gathered from the anti-dumping duty will be there. You get Rs. 20 more per ton. When they sell at a lower price than British material, the Government of India will get the additional duty of Rs. 20 per ton. If it drops still further then this amount gathered can be paid to the Indian industry.

Mr. Mathias.—In other words you would recommend Imperial preference?

Mr. Anandji.—That is for the politicians to consider. I may add that with this system of heavy duties there is one other thing which is very necessary in the interest of the trade and that is the system of having warehouses where steel can be stored until people can pay the duty. At present that is not in existence. Goods are allowed to lie at jetties until the duty is paid and people have got to pay rent and port dues and then take delivery of them.

President.—We shall consider that. But I may point out that wherever there is anti-dumping legislation there is bound to be some dislocation of trade.

Mr. Anandji.—Still we have got to face it because we have got to import; it is a necessity to us. In Australia and other countries where they have got this anti-dumping duty, imports are not so heavy as they are in India and therefore dislocation is likely to be less. They have not got so many importing centres also. They have only one or two ports I think.

President.—Supposing we put on this anti-dumping duty on Continental steel would you suggest that there should be no difference between Continental and British steel on account of cheaper quality?

Mr. Anandji.—There should be and that difference should be made up by the additional duty.

Dr. Matthai.—Assuming Rs. 140 is a fair selling price for Tatas, and the present c.i.f. price of British steel is Rs. 100 and Continental Rs. 80, this duty to start with will be Rs. 40 based on the British selling price. Would you ask that the duty on the Continental steel should be Rs. 40 *plus* Rs. 20, that is Rs. 60, or would it be something else?

Mr. Anandji.—It should be Rs. 40 *plus* the anti-dumping duty.

Dr. Matthai.—The whole difference between the British and Continental prices must come in as the additional duty?

Mr. Anandji.—You shall have to take something more.

Mr. Mather.—Would you deal with that by bounty?

Mr. Anandji.—Yes.

Dr. Matthai.—Would there be any practical difficulty in administering the differential duty?

Mr. Anandji.—There is always the port of shipment mentioned in the Bill of Landing; the country of origin has got to be mentioned in the invoice.

Dr. Matthai.—Do you mean that they would get half finished material and re-roll it in England?

Mr. Anandji.—That is what is likely to happen.

Dr. Matthai.—How are you going to meet that?

Mr. Anandji.—That difficulty must remain. You can't meet that difficulty. They can buy billets from the Continent and turn them into bars.

President.—They here always done that to some extent.

Mr. Anandji.—Now they don't do it. The difference between bars and billets is only 5*s*. It doesn't pay to turn billets into bars. So far as our object is concerned, which is the protection of Indian industry that is being attained. It may put some additional profit in the hands of English manufacturers or English middlemen, but that is bound to happen. We have got to look to our own interests.

President.—From our own point of view it makes no difference whether they make a little more or a little less so long as our object is attained.

Mr. Anandji.—That is what I say.

Mr. Mathias.—But if billets were shipped to England, turned into bars and then reshipped to India where that would be sold below the price of imported English steel on which you fixed your duty, would not the anti-dumping duty be evaded?

Mr. Anandji.—If the difference between the Belgian price of billets and the Belgian bars became very great they would ship billets to England, would turn them out into bars and then ship them out here, but if the present prices of billets are maintained on the Continent, then the British prices cannot go down lower. At present there is a difference of 5*s*. On the other hand there would be the freight to be paid to England, labour in England, the cost of reshipment again from England.

Mr. Mathias.—I understand that at present it doesn't pay to ship billets to England and turn them into bars.

Mr. Anandji.—No.

Mr. Mathias.—If there was an anti-dumping duty, it might pay them.

Mr. Anandji.—Yes.

Mr. Mathias.—Your conclusion is that there is no probability of any anti-dumping scheme being rendered useless by export of Continental material to England and re-export to India possibly in a different shape after re-manufacture.

Mr. Anandji.—Not under the present circumstances.

President.—That kind of re-rolling has always been going on in England. It would not be a new thing at all and the price of British steel itself is governed by the price of re-rolled steel. If the re-rolled steel was cheaper the man in England wouldn't get a higher price because he has used all English materials than the man who has re-rolled.

Mr. Mather.—That is already one of the factors of the present British prices.

Mr. Anandji.—This will operate in this way. The difference between tested and untested will come into operation.

President.—That is another thing.

Mr. Anandji.—We are automatically putting some difficulty in the way of Continental steel coming easily into the country by asking England to get it re-rolled. That makes it more difficult.

President.—Quite, but that question of re-rolling, I don't think, is such a serious factor. As I said that has formed part of the factors which govern the British prices.

Mr. Anandji.—To some extent it is being done even now particularly for sheet bars. They buy their sheet bars and turn them into sheets.

Mr. Mathias.—Do you think that there is no probability of the Continental makers of steel evading this anti-dumping duty by declaring it as a British article?

Mr. Anandji.—That depends on the Customs regulations they have in England. It is very difficult to say.

President.—There are two things that are in his way. The gap is not very big. There is a difference of about 15*s*. between the f.o.b. price of Continental steel to a British port and the c.i.f. price.

Mr. Mather.—By the time it is landed in an English warehouse, the difference would be something like that.

Mr. Anandji.—Would that be so much as that? What would be the freight?

Mr. Mather.—Freights do not go in proportion to the distance.

Mr. Anandji.—The freight to India would be 17*s*. 6*d*.

President.—The freight from the Continent is now 6*s*. less than the freight from a British port, so another 6*s*. will be added and there is the risk of being found out and various other things.

Mr. Anandji.—There is this point that has got to be considered. The present freight to England cannot be maintained when big shipments of 3,000 or 4,000 tons are made.

Mr. Mather.—There is already a big trade in sheet bars and billets.

Mr. Anandji.—This might further increase the trade and there might be a cutting in freights.

President.—If there was a difference of Rs. 20 to Rs. 25 only the inducement is not sufficiently big for a man to take the steel to a British Port, re-ship and make false declarations and various other things. That is what it amounts to.

Mr. Anandji.—That is true.

President.—A man like you would not do it.

Mr. Anandji.—It could not be done by a man here. He would have to get somebody in England, to do it. It has got to be done at the other end.

Dr. Matthai.—Leaving out all the details as far as you are concerned as you have thought out the position—supposing generally a scheme on these lines is drafted—Tatas require at present a protection of Rs. 40 a ton let us say—you give a fraction of it in the shape of duties which you fix for the whole period for which you are given protection and the rest in the shape of bounties, the rate of bounty varying according to the circumstances of the import trade. Roughly, without going into details that is your scheme.

Mr. Anandji.—That is what I said. But there is this additional difference that I want to make between British steel and Continental steel by having a higher duty on Continental steel—call it dumping duty or anything you like—and that duty shall be with the Government of India for payment to the Steel Company whenever there is a fall in prices.

Dr. Matthai.—When you have a general scale of duties, you have a fund out of which bounties may be financed.

Mr. Anandji.—I don't want to put the same duty on all steel.

Dr. Matthai.—We are doing that. This would simply mean an extension of the scheme.

Mr. Anandji.—Distinction between countries with a depreciated currency and England.

Mr. Mathias.—Germany has not got a depreciated currency, I understood you to mean that on the one side there was to be a duty for Great Britain and on the other side a duty for all the other countries.

Mr. Anandji.—I was wrong there. I would make a distinction between England and the Continental countries.

President.—About bounties there are very great constitutional difficulties. No legislature would give a sort of free hand to any executive Government. They must fix the bounty. I know of no country where they say to the Chancellor of Exchequer, " there is a fund you can do as you like with it." That is a practical difficulty.

Mr. Anandji.—The alternative will be to give power to the executive to disorganise the whole trade, to cause more hardships than would be caused in this case. The alternative is much worse.

President.—When money has to be spent, the Legislature wants control. When money has to be got in by putting a duty, it need not be so. That is all the difference.

Mr. Anandji.—You can fix the principles by which the bounty is to be paid. That doesn't leave much option to the executive.

President.—It is an indefinite liability. I am just trying to explain the difficulty.

Mr. Anandji.—We are providing funds for the liability in a way. That scheme will provide funds.

Mr. Mather.—Do you deal in tinplates at all?

Mr. Anandji.—No.

President.—Supposing there was this question of anti-dumping duty, the Government will have to keep itself in close touch with prices. Would there be any difficulty in your supplying figures as you have been doing up to now from time to time every month or at stated periods?

Mr. Anandji.—I can do that. I can send a special list to the Tariff Board or to the Government of India.

(7) Letter from Mr. G. B. Trivedi, dated 1st July 1926.

I am in receipt of your letters of the 17th April and 8th June. I am sorry for not being able to reply earlier.

The prices ruled in the Bombay Iron Market from May 1925, to April 1926, as follows: —

B. S. Bars	Rs. 130 to 120	per ton c.i.f.
Angles	Rs. 130 to 120	,, ,,
Tees	Rs. 140 to 125	,, ,,
Joists	Rs. 130 to 115	,, ,,
Plates $\frac{1}{8}$	Rs. 140 to 125	,, ,,
Plates $\frac{3}{16}$ and up	Rs. 130 to 120	,, ,,
Plates $\frac{1}{16}$	Rs. 150 to 140	,, ,,
Sheets 4'×2½'×2	Rs. 150 to 130	,, ,,
Sheets $\frac{3}{8}$	Rs. 160 to 145	,, ,,
Sheets $\frac{6}{8}$	Rs. 180 to 150	,, ,,
Galvanised corrugated sheets	Rs. 275 to 305	,, ,,
and again to	Rs. 280	,, ,,

This will show you that local prices have fallen in sympathy with the Continental markets.

I shall be glad to help the Board with any further information required. On receipt of your questionnaire, I shall be glad to give my views in writing and to give oral evidence when required. May I know when you will begin oral evidence and at what place?

सत्यमेव जयते

(8) *Letter from Messrs. Geo. Service and Company, dated the 8th May 1926.*

We are obliged by your letter No. 164 of the 17th ultimo, and as desired attach 6 copies of the c.i.f. sterling prices for Continental R. S. sections from May 1925 until April 1926.

Continental.

——	Beams.			Angles.			Bars.			Plates.		
1925.	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
May	6	11	8	6	16	6	6	16	6	8	0	10
June	6	10	6	6	15	3	6	15	0	7	19	8
July	6	10	6	6	14	0	6	14	0	7	18	6
August	6	6	9	6	11	8	6	11	8	7	12	4
September	6	2	0	6	7	0	6	7	0	7	7	9
October	6	0	8	6	4	4	6	4	4	7	1	4
November	5	11	8	5	19	9	5	19	6	6	11	8
December	5	12	2	5	19	9	5	19	6	6	6	9
January	5	17	0	6	1	10	6	1	10	6	6	9
February	5	17	0	6	1	10	6	1	10	6	6	9
March	5	18	3	6	4	4	6	4	4	6	6	9
April	5	17	0	6	4	4	6	4	4	6	6	9

All prices are C. I. F. Bombay.

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(9) (*a*) *Letter from the Bombay Iron Merchants Association, dated the 26th July 1926.*

I herewith forward six copies of a statement giving the market prices month by month from May 1925 up to April 1926 of certain kinds of British and Continental rolled steel as also six copies of a similar monthly statement for each of the months of April, May, June and July 1926 as required in your letter Nos. 164 and 165 of the 9th instant.

Market Prices.

Names of Article.	For May 1925.	For June 1925.	For July 1925.	For August 1925.	For September 1925.	For October 1925.	For November 1925.	For December 1925.	For January 1926.	For February 1926.	For March 1926.
	Per ton.	Per ton.	Per ton.	Per ton.	Per ton.	Per ton.	Per ton.	Per ton.	Per ton.	Per ton	Per ton
British beams	...	...	...	...	.	...	...	...	...	...	..
,, angles	..	...	...	...	...	...	..	...	...	...	...
,, bars	...	...	...	...	...	..	...	...	...	...	...
,, plates ½ inch thick and upwards.	...	...	...	...	...	...	...	...	...	...	...
,, Galvanised Corrugated sheets.	315	335	280	272	280	285	280	295	292	290	290
,, Black sheet . . .	...	..	...	...	...	...	...	...	...	...	...
Continental beams . . .	140	140	140	115	140	145	145	146	145	125	120
,, angles . . .	140	140	140	150	145	155	145	145	140	175	131
,, bars . . .	140	140	145	140	135	150	140	145	155	140	145
,, plates . . .	160	160	160	160	150	150	150	175	150	140	135
,, Black sheet . .	190	190	170	170	170	170	165	160	152	160	155

The above rates are subject to 2 per cent. discount including brokerage for all articles except Continental beams for which there is no discount but only brokerage of 5/8 per cent.

Names of Articles.	Market price for April 1926.	Market price for May 1926.	Market price for June 1926.	Market price for July 1926.
	Per ton.	Per ton.	Per ton.	Per ton.
	Rs.	Rs.	Rs.	Rs.
British beams	...	...	...	...
,, angles	...	...	...	...
,, bars	...	...	...	...
,, plates ½-inch thick and upwards.	...	...	...	...
,, Galvanised corrugated sheets.	295	290	307	280
,, Black sheet	...	...	...	...
Continental beams	120	125	120	120
,, angles	135	125	130	125
,, bars	150	135	135	135
,, plates	140	140	130	130
,, Black sheet	155	152	150	150

The above rates are subject to 2 per cent. discount including brokerage for all articles except Continental beams for which there is no discount but only brokerage of 5/8 per cent.

सत्यमेव जयते

(9) (b) *Letter from the Bombay Iron Merchants' Association, Bombay, dated the 10th September 1926.*

In continuation of my letter of the 20th July 1926, I forward herewith six copies of a statement giving the market prices for the month of August 1926 of certain kinds of British and continental rolled steel as required in your letter Nos. 164 and 165 of the 9th July 1926.

Name of Articles.	Market price for August 1926. Rs. Per ton.
British Beams	...
British Angles	...
British bars	...
British plates, ½ inch thick and upwards	...
British galvanised corrugated sheets	280
British Black sheet	...
Continental beams	115
Continental angles	120
Continental bars	125
Continental plates	125
Continental black sheet	140

The above rates are subject to 2 per cent. discount including brokerage for all articles except for continental beams for which there is no discount but only brokerage of 5/8 per cent.

PESTONJEE DADABHAI PADSHA,
Secretary,
Bombay Iron Merchants' Association.

सत्यमेव जयते

III.—Correspondence regarding coking coal.

(1) *Letter from the Tariff Board, to the Director, Geological Survey of India, dated the 17th April 1926.*

I am directed by the Tariff Board to invite a reference to paragraph 3 of your letter, dated 12th January 1924, printed at page 85 of the First Report regarding the grant of protection to the Steel Industry, forwarding Dr. Fox's Report on the Mineral Resources of India, and to ask if you would kindly inform the Board whether the geological examination of the Raniganj and Jharia coalfields has been carried out, and if any conclusions as to the quantity of coking coal available in those two fields have been arrived at. I am also to enquire whether the fact that large quantities of coking coal are being consumed for purposes not connected with the manufacture of steel, was taken in account when the conclusion at the end of paragraph 13, page 89 of the same Report, was reached.

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(2) *Letter from the Director, Geological Survey of India, dated the 30th April 1926.*

I have the honour to acknowledge the receipt of your letter No. 163 of the 17th instant. The geological examination of the Raniganj coalfield was commenced last October, but is not yet completed. The examination of the Jharia coalfield has not yet been commenced, as the new topographical maps are not yet available. It is hoped to commence work in this area during the coming field-season. It will be at least a year—probably two years—before it will be possible to reach any reliable conclusions regarding the quantity of coking coal available in these fields.

2. With regard to your second question, my estimates of coal available for the metallurgical industry did not in a mathematical sense take account of the fact that some of it is being used, and will be used, for purposes other than metallurgical. It is impossible, as you will agree, to make any mathematical allowance for such a contingency. It is impossible to foresee how much of the coking coal is going to be used for railways and other non-metallurgical purposes. The Tata Iron and Steel Company, for instance, are actually selling, or, at any rate, offered to sell, some of their own coking coal to the railways.

3. My final statement on page 89, however, to the effect that "there is enough coking coal in India to supply the iron and steel industry with 4 million tons of metallurgical coke per annum for the next 150 years at least" was made, allowing a margin of 230 million tons. This is a very big margin, and was left for fires, accidents, over-head losses, depreciation in quality of seams, etc. It would, I think, also cover much of the coal which is at present owned by the railways. I did not, however, make any attempt to estimate the amount of coal which is likely to be consumed in this way. My idea was to base my statements on the coal *available* for the iron and steel industry, and to leave it to the Tariff Board to reduce the estimate as they thought fit in order to make allowances for any of the coking coal not being used for that industry. This they presumably did by reducing my period of 150 years to 100 years (see page 12, paragraph 20 (*i*)). As I have said, my statement on page 89 left a big margin, which would, I think, cover quite a lot of the coal used for non-metallurgical purposes. My object was to give a conservative estimate, and the probability is that when we know more about the total quantity of first-class coking coal in India, it will be possible to extend my period of 150 years.

4. It is perhaps unnecessary for me to point out how extremely difficult it is to make any definite statements about the subject at all, not only from want of knowledge, but from complications regarding this subject itself. I can explain what I mean best by giving you an example. The Kargali seam of the Bokaro coal-field yields a very hard coke, which would be eminently

suitable for metallurgical purposes, were it not for its high ash percentage; by mixing it with a coal whose coking properties may be very inferior but whose ash percentage is low, it might be possible to utilize the whole of the Kargali seam for the manufacture of metallurgical coke. The same thing applies to the Assam coal, which yields a first-class coke, but for the fact that there is too much sulphur. It is extremely difficult to know where to draw a line and when to include such seams as the Kargali seam in one's estimates, but facts justify, I consider, my statement on page 89 of the Tariff Board Report.

सत्यमेव जयते

IV.—Correspondence with the Government of India, in the Commerce Department regarding bounties.

(1) *Letter from the Tariff Board, to the Government of India, Department of Commerce, Simla, dated the 6th May 1926.*

I am directed to invite a reference to section 4 (*3*) of the Steel Industry (Protection) Act, 1924, as amended by the Steel Industry (Amendment) Act, 1926, and to enquire whether any notifications prescribing the conditions subject to which and the manner in which the bounties referred to in subsection (*1*) of the Act may be paid, have been issued by the Governor General in Council. I am also to enquire whether any such bounties have been paid to any Company firm or person not engaged in the manufacture of steel rails, fishplates or wagons at the time of the passing of the above mentioned Act, but whose operations have commenced since that date in the manner contemplated in section 5.

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(2) *Letter No. 298-T. (M)., dated the 29th May 1926, from Assistant Secretary to the Government of India, to Secretary, Tariff Board.*

I am directed to acknowledge the receipt of your letter No. 202, dated the 6th May 1926, in which you enquire—

(1) whether any notifications under section 4 (*3*) of the Steel Industry (Protection) Act, 1924, as amended, have been issued, and

(2) whether bounties have been paid to any Company, firm or person not engaged in the manufacture of steel rails, fishplates or wagons at the time of the passing of the Steel Industry (Protection) Act, 1924, but whose operations have commenced since that date in the manner contemplated in section 5.

2. As regards (1) I am to say that the matter is under consideration, and you will be informed when a decision has been reached. As regards (2) the Peninsular Locomotive Company, Limited, of Bombay, who have fulfilled the conditions laid down in section 5 of the Steel Industry (Protection) Act, 1924, will shortly be receiving bounties in respect of railway wagons, but as the first batch has not been paid for, no bounties have yet been received by them.

No application under section 5 has been received from any other firm or person.

V.—Correspondence with the Army Department of the Government of India regarding Army War requirements of steel products.

(1) *U. O. reference from M. G. S. Branch.*

Ref.:—Department of Commerce 'Tariffs' Resolution No. 260-T. (64), dated 3rd April 1926.

The Army is definitely interested in the Steel Industry in India, and you doubtless know the reasons, but I think there will be no harm in briefly stating them.

So long as a Steel Industry is working on a large scale in India Army Reserves do not need to be increased.

At present we have informal arrangements with Messrs. Tata & Co., whereby orders are to be placed on them on the date of mobilisation and they supply us with shell bar, commencing at the end of one month from zero day, at the rate of 280 tons monthly. This does not take into account Army railway steel requirements or feed of steel to subsidiary industries such as the making of pickaxes, mamooties, etc.

If the steel industry, for any reason, ceased to function it would be necessary for Army Reserves to be largely increased, or alternatively for plant to be provided to meet war requirements. Such plant would stand idle in peace.

The Secretary, Tariff Board,
through
The Secretary, Army Department.

(Sd.)
M. G. S.

U. O. I. No. 1153 (M. G. I. B.), dated 28th April 1926.

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(Sd.) G. BURDON.

11th May 1926.

A. D. U. O. No. 1819-A.-II, dated 12th May 1926.

Secretary, Tariff Board.

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(2) *Letter from the Tariff Board, to the Master General, Supply Branch, Army Headquarter, Simla, dated the 20th May 1926.*

I am directed to acknowledge receipt of your unofficial note No. U. O. I. 1153 (M. G. I. B.), dated the 28th April 1926, and in reply to enquire whether the Army is also interested in the subsidiary steel industries which are concerned with the production of steel castings, spring steel, steel fencing and other wire, tinplates, and the like. The Board, therefore, would be glad if you would kindly address them on the subject of the supply in war-time of these articles and would like to know if you have any informal arrangements, similar to the one you have with the Tata Iron and Steel Company, with any manufacturers who produce them.

(3) *Letter, dated 31st May 1926, from Director of Ordnance Factories and Manufactures, Army Headquarters, India, to the Secretary, Tariff Board.*

Ref. Your No. 260, dated 20th May 1926.

The matter will be followed up more fully by the recently formed Principal Supply Officers Committee and its various Sub-Committees. You would naturally be kept informed of Army War requirements by this Committee.

2. *Tinplate.*—We have tested the tinplate made by the Tinplate Company, Jamshedpur, and this material has been approved as a War time substitute for ammunition boxes. No definite arrangement for use of this in war has, however, been made with the firm so far. Our total tinplate demand is very large.

3. *Steel Castings.*—Steel castings of a large size we would make for Army requirements in our works at Ishapore. Small steel castings cannot be touched by our plant, but at present the total Army demand is small. We are keeping in touch on the matter with Messrs. Hukumchand and Company, who appear to have the only likely plant. The quality of this firm's casting is however not really satisfactory yet.

4. *Wire.*—Wire suitable for fencing and other purposes. There is a large Army demand for this both barbed and plain. We have no informal agreements on this point.

5. *Wire Ropes.*—There is an appreciable Army demand for wire rope. The major part is, however, of special quality for which there is unlikely to be an Indian trade demand.

6. *Chains.*—There is an appreciable Army demand particularly in war for light chain.

7. Pending the operation of the Principal Supply Officer's Committee we are not in a position to give any idea of the size of demands.

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(4) *Letter from the Tariff Board, to the Director of Ordnance Factories and Manufacture, The Master General, Supply Branch, Army Headquarters, Simla, dated the 15th June 1926.*

I am directed by the Tariff Board to invite your attention to the attached copy of the correspondence beginning with your U. O. I. No. 1153 (M. G. I. B.), dated the 28th April 1926, and ending with your letter No. 1153/4 (M. G. I. B.), dated the 31st May 1926, and to say that the Board attaches very considerable importance to the questions relating to the Army war requirements of steel and of various steel articles and will be glad to receive any available information on this subject. In your letter of the 31st May 1926, you say that the matter will be followed up more fully by the recently formed Principal Supply Officers Committee and its various sub-committees and that the Board will be kept informed of Army war requirements by this Committee. The Board is not aware whether this Committee has yet begun to function and as any information, which is to be of assistance in the present Statutory Steel enquiry, must reach the Board by the end of August, I am to ask you kindly to pass on this correspondence to the Principal Supply Officers Committee with a request that the Board may be furnished with any information available.

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(5) *Letter from the Army Headquarter, India, Master General of Supply Branch, Simla, to the Tariff Board, dated the 24th June 1926.*

Reference:—Your No. 363, dated the 15th June 1926.

The principal Supply Officer's Committee (India) has begun to function but data accumulated is still scanty.

2. So far, however, we are in a position to give the following approximate figures:—

(a) Army requirements in war of shell bar and mild steel for ordnance requirements will be for ordinary mobilisation. 65,000—68,000 cwts. monthly, of which 9,000 cwts. can be produced in Ordnance Factories and the balance obtained from the trade.

(b) If further mobilisation occurs the preliminary estimate is a further 80,000 cwts. monthly of this class of steel.

This is, however, only a rough approximation.

3. We are not in a position to give you data over the following:—

(1) Wire requirements including barbed wire.
(2) Rail Steel.
(3) Structural Steel.
(4) Steel Castings.
(5) Die and Spring steels.
(6) Tool steels.

4. It is possible, though not likely, that very rough approximations could be given for (1), (2) and (3) by 15th August 1926, and if so, they will be communicated at once by sub-committee No. 2.

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VI.—Letter No. 267-T. (2), dated the 12th July 1926, from J. D. Penny, Esq., I.C.S., Deputy Secretary to the Government of India, to the Secretary, Tariff Board.

I am directed to invite the attention of the Tariff Board to the Resolution in this Department No. 267-T. (2), dated the 3rd July 1926, in which it was stated that the recommendation of the Board for the removal of the import duty on spelter would be taken into consideration at the time of the next budget and in connection with the further protection of the steel industry at the Delhi Session of the Legislature, 1927.

2. In the mean time, as observed in the Resolution, the existing protective duty on galvanized sheets will come under the consideration of the Board in connection with the statutory enquiry into the steel industry. I am to say that if the Board decides to recommend that the protection on galvanized sheets should continue, the Government of India would be glad if it would frame alternative proposals for the measure of protection required, one based on the assumption that the duty on spelter will be removed, and the other on the assumption that it will not.

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MGIPC—L—473 STB—10-2-27—800.

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